

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 63

[OAR-2002-0057; FRL- ]

RIN [2060-AH75]

**National Emission Standards for Hazardous Air Pollutants:  
Hydrochloric Acid Production**

**AGENCY:** Environmental Protection Agency (EPA).

**ACTION:** Final rule.

**SUMMARY:** This action finalizes national emission standards for hazardous air pollutants (NESHAP) for hydrochloric acid (HCl) production facilities, including HCl production at fume silica facilities. The EPA has identified hydrochloric acid production facilities as major sources of hazardous air pollutant (HAP) emissions. These standards will implement section 112(d) of the Clean Air Act (CAA) by requiring all such major sources to meet HAP emission standards and implement work practice standards that reflect the application of maximum achievable control technology (MACT). The primary HAP that will be controlled with this action is hydrochloric acid. This HAP is associated with a variety of adverse health effects including chronic health disorders (for example, effects on the central nervous system, blood, and heart) and acute health disorders (for example,

irritation of eyes, throat, and mucous membranes and damage to the liver and kidneys).

**EFFECTIVE DATE:** The final rule is effective [**INSERT DATE OF PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER**].

**ADDRESSES:** Docket. All information considered by the EPA in developing the final rule, including public comments on the proposed rule and other information developed by the EPA in addressing those comments since proposal, is located in Public Docket No. OAR-2002-0057 at the following address: Air and Radiation Docket and Information Center, U.S. EPA, 1301 Constitution Avenue, NW, Washington, DC 20460. The docket is located at the above address in Room B102, and may be inspected from 8:00 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays.

**FOR FURTHER INFORMATION CONTACT:** For information concerning applicability and rule determinations, contact your State or local regulatory agency representative or the appropriate EPA Regional Office representative. For information concerning analyses performed in developing the final rule, contact Mr. William Maxwell, Combustion Group, Emission Standards Division (C439-01), U.S. EPA, Research Triangle Park, North Carolina, 27711; telephone number (919) 541-5430; fax number (919) 541-5450; electronic mail address: maxwell.bill@epa.gov.

**SUPPLEMENTARY INFORMATION:**

Regulated Entities. Categories and entities potentially regulated by this action include:

Category	SIC <sup>a</sup>	NAICS <sup>b</sup>	Regulated Entities
Industry	2819	325188	Hydrochloric Acid Production
	2821	325211	
	2869	325199	

<sup>a</sup> Standard Industrial Classification

<sup>b</sup> North American Information Classification System

This list is not intended to be exhaustive, but rather provides a guide for readers regarding entities likely to be regulated by this action. To determine whether your facility is regulated by this action, you should examine the applicability criteria in §63.8985 of the final rule. If you have questions regarding the applicability of this action to a particular entity, consult your State or local agency (or EPA Regional Office) described in the preceding FOR FURTHER INFORMATION CONTACT section.

Docket. The EPA has established an official public docket for this action under Docket ID No. OAR-2002-0057. The official public docket consists of the documents specifically referenced in this action, any public comments received, and other information related to this action. Although a part of the official docket, the public docket does not include Confidential Business Information (CBI) or other information whose disclosure is restricted by statute.

The official public docket is the collection of materials that is available for public viewing at the Air and Radiation Docket in the EPA Docket Center, (EPA/DC) EPA West, Room B102, 1301 Constitution Ave., NW, Washington, DC. The EPA Docket Center Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Reading Room is (202) 566-1744, and the telephone number for the Air Docket is (202) 566-1742.

Electronic Access. You may access the Federal Register document electronically through the EPA Internet under the "Federal Register" listings at <http://www.epa.gov/fedrgstr/>. An electronic copy of the final rule will also be available on the worldwide web (WWW) through the Technology Transfer Network (TTN). Following signature, a copy of the final rule will be posted on the TTN's policy and guidance page for newly proposed or promulgated rules <http://www.epa.gov/ttn/oarpg>.

An electronic version of the public docket is available through EPA's electronic public docket and comment system, EPA Dockets. You may use EPA Dockets at <http://www.epa.gov/edocket/> to view public comments, access the index listing of the contents of the official public docket, and to access those documents in the public docket that are available electronically. Although not all docket

materials may be available electronically, you may still access any of the publicly available docket materials through the docket facility identified above. Once in the system, select "search," then key in the appropriate docket identification number.

Judicial Review. Under CAA section 307(b), judicial review of the final NESHAP is available only by filing a petition for review in the U.S. Court of Appeals for the District of Columbia Circuit on or before [**INSERT DATE 60 DAYS AFTER**

**DATE OF PUBLICATION OF THE FINAL RULE IN THE FEDERAL**

**REGISTER**]. Only those objections to the NESHAP which were raised with reasonable specificity during the period for public comment may be raised during judicial review. Under section 307(b)(2) of the CAA, the requirements established by today's final action may not be challenged separately in any civil or criminal proceeding we bring to enforce these requirements.

Outline. The information in this preamble is organized as follows:

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## **I. Background**

- A. What is the source of authority for development of NESHAP?

Section 112 of the CAA requires us to list categories and subcategories of major sources and area sources of HAP and to establish NESHAP for the listed source categories and subcategories. Hydrochloric acid production and fume silica production were listed as source categories under the

production of inorganic chemicals group on EPA's initial list of major source categories published in the Federal Register on July 16, 1992 (57 FR 31576).<sup>1</sup> On September 18, 2001, we combined these two source categories for regulatory purposes under the production of inorganic chemicals group and renamed the source category as HCl production (66 FR 48174). The next revision to the source category list will reflect this change. Major sources of HAP are those that have the potential to emit greater than 9 megagrams per year (Mg/yr) (10 tons per year (tpy)) of any one HAP or 23 Mg/yr (25 tpy) of any combination of HAP.

B. What criteria are used in the development of NESHAP?

Section 112 of the CAA requires that we establish NESHAP for the control of HAP from both new and existing major sources. The CAA requires the NESHAP to reflect the maximum degree of reduction in emissions of HAP that is achievable. This level of control is commonly referred to as the MACT.

The MACT floor is the minimum control level allowed for NESHAP and is defined under section 112(d)(3) of the CAA. In essence, the MACT floor ensures that the standard is set at a level that assures that all major sources achieve the level of control at least as stringent as that already

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<sup>1</sup> Later listing notices (e.g., 66 FR 8220) refer to the source category as "fumed" silica.

achieved by the better-controlled and lower-emitting sources in each source category or subcategory. For new sources, the MACT floor cannot be less stringent than the emission control that is achieved in practice by the best-controlled similar source. The MACT standards for existing sources can be less stringent than standards for new sources, but they cannot be less stringent than the average emission limitation achieved by the best-performing 12 percent of existing sources in the category or subcategory for which the Administrator has emissions information (or the best-performing five sources for which the Administrator has or could reasonably obtain emissions information for categories or subcategories with fewer than 30 sources).

In developing MACT, we also consider control options that are more stringent than the floor. We may establish standards more stringent than the floor based on consideration of the cost of achieving the emissions reductions, any non-air quality health and environmental impacts, and energy requirements.

C. How did the public participate in developing the final rule?

Prior to proposal, we met with industry representatives once to discuss the data and information used to develop the proposed standards. In addition, these and other potential stakeholders, including equipment vendors, environmental



groups, and the general public, had opportunity to comment on the proposed standards.

The proposed rule was published in the Federal Register on September 18, 2001 (66 FR 48174). The preamble to the proposed rule discussed the availability of technical support documents, which described in detail the information gathered during the standards development process. Public comments were solicited at proposal.

We received 22 public comment letters on the proposed rule. The commenters represent the following affiliations: HCl producers, industrial trade associations, and one group of citizens. In the post-proposal period, we met with industry representatives to discuss their concerns. Meeting records are found in Docket ID No. OAR-2002-0057. All of the comments have been carefully considered, and, where appropriate, changes have been made for the final rule.

## **II. Summary of the Final Rule**

### **A. Who is subject to the final rule?**

The final rule covers HCl production located at plant sites that are major sources of HAP emissions. The HCl production facility is the basic unit defined in the final rule. Specifically, the final rule defines an HCl production facility as the collection of unit operations and equipment associated with the production of liquid HCl

product. Therefore, a plant site could have several separate and distinct HCl production facilities. However, as discussed more in subsection C of this section, the affected source includes all HCl production facilities at the same site.

There are several characteristics that define an HCl production facility and make the facility subject to the final rule that require explanation. First, the facility must produce a liquid HCl product with a concentration of 30 weight percent or greater during its normal operations. Facilities that produce only low concentration acid, and facilities that produce low concentration acid and only occasionally produce 30 weight percent acid, are not subject. Second, the liquid HCl must be produced by absorbing gaseous HCl into either water or an aqueous HCl solution. Production of an anhydrous HCl product is not covered by the final rule. Also, production of a liquid HCl product by a chemical reaction that occurs in the liquid phase, or any other process that does not involve the absorption of gaseous HCl into water or aqueous HCl, is not covered.

There are numerous types of processes that produce a gaseous stream containing HCl that is the starting point for an HCl facility (including fume silica production). However, the final rule is blind to the type of process that

generates the HCl, as an HCl production facility begins at the point where the stream containing HCl enters the absorber. Accordingly, it does not matter if the gaseous stream containing HCl is a by-product or even a waste-product. If the gaseous stream is used to produce 30 weight percent or greater liquid HCl product, it is a facility that is subject to the final rule.

The final rule clearly defines the boundaries of an HCl production facility. As noted above, an HCl production facility begins at the point where a gaseous stream containing HCl enters the absorber. The HCl production facility includes all HCl storage tanks that contain a liquid HCl product that is produced in the HCl production unit. The HCl production facility also includes all HCl transfer operations that load the HCl product produced in the HCl production unit into a tank truck, rail car, ship, or barge, and for which loading liquid HCl is the predominant use. The predominant use of a transfer rack is the material that is loaded by the transfer rack in the greatest amount. The HCl production facility also includes the piping and other equipment in HCl service used to transfer the liquid HCl product from the HCl production unit to the HCl storage tanks and/or HCl transfer operations. The HCl production facility ends at the point where the liquid HCl product produced in the HCl production unit is

loaded into a tank truck, rail car, ship, or barge, at the point the HCl product enters another process on the plant site, or at the point the HCl product leaves the plant site via pipeline.

Please note that what happens to the liquid HCl product after it is produced is not relevant in determining the applicability of the final rule. While there are emission limitations for storage tanks and transfer operations, these operations do not have to be present for an HCl production facility to be subject to the final rule. Whether the HCl produced is used onsite, piped offsite, or loaded into railcars, tank trucks, ships, or barges has no bearing on whether the HCl production facility is subject.

The final rule does exclude HCl production facilities under certain circumstances. First, an HCl production facility is not subject to the final rule if all of the gaseous streams containing HCl and chlorine ( $\text{Cl}_2$ ) from HCl process vents, HCl storage tanks, and HCl transfer operations are recycled or routed to another process prior to being discharged to the atmosphere. Also, an HCl production facility is not subject to the final rule if it produces HCl through the direct synthesis of  $\text{Cl}_2$  and hydrogen and is part of a chlor-alkali plant; or if it is a research and development facility.

In addition, the final rule excludes certain HCl production facilities that are part of other source categories where the emissions are subject to one of the following federal standards: Pulp and Paper Industry NESHAP (40 CFR part 63, subpart S), Steel Pickling--HCl Process Facilities and Hydrochloric Acid Regeneration Plants NESHAP (40 CFR part 63, subpart CCC), Pesticide Active Ingredient Production NESHAP (40 CFR part 63, subpart MMM), Hazardous Waste Combustors NESHAP (40 CFR part 63, subpart EEE), Hazardous Waste Treatment, Storage, and Disposal Facilities (40 CFR part 264, subpart O - Incinerators, section 264.343(b)), and Hazardous Waste Management Facilities (40 CFR part 266, subpart H - Boilers and Industrial Furnaces, section 266.107).

Regulatory overlap between the final rule and the Hazardous Organic NESHAP (HON) is slightly more complicated. In general, the HON only covers emissions of organic HAP, which obviously excludes HCl and Cl<sub>2</sub>. The exception to this is if a halogenated stream (which is defined as a stream with a mass emission rate of halogen atoms contained in organic compounds of 0.45 kilograms per hour or greater) is routed to an incinerator or other combustion device to control the organic HAP, the halogens leaving the incinerator are required to be reduced by 99 percent. Therefore, if in a HON unit, a chlorinated organic compound

is sent to an incinerator and the outlet stream (which would contain HCl) is then routed through an absorber to produce liquid HCl, the resulting HCl emissions from the absorber would be subject to 40 CFR 63.113(c) of the HON, which requires a 99 percent reduction in HCl emissions. These HCl production units are exempted from the HCl Production NESHAP, since the emissions are subject to the HON.

However, HCl gas is often produced as a by-product of an organic chemical in a unit that is subject to the HON. In this situation, the HCl emissions are not covered by the HON because they are not formed in an incinerator burning a halogenated stream. If this vent stream containing HCl is routed to an absorber and liquid HCl is produced, then it is an HCl production facility and is subject to the final rule if it meets the other applicability requirements. Therefore, in this situation the result could be that the same equipment, and even the same emission stream, is subject to two MACT standards (the organic HAP subject to the HON and the HCl and Cl<sub>2</sub> subject to the HCl NESHAP). In other words, where a liquid HCl product is produced as a by-product in a HON unit, the HCl Production NESHAP reaches into the HON unit to require control of the HCl and Cl<sub>2</sub> emissions.

B. What are the primary sources of emissions, and what are the emissions?

The primary HAP known to be released from HCl production is HCl. Chlorine may also be emitted from HCl production. These potential emission sources include process vents, storage tanks, transfer operations, equipment leaks, and wastewater.

#### 1. Types of Emission Sources

Most HCl production processes begin with a gaseous stream containing HCl. The stream can be a by-product stream from another process, an outlet stream from a combustion device that is treating chlorinated organic compounds, or a stream from a direct synthesis reaction furnace where hydrogen and  $\text{Cl}_2$  are burned. No matter the origin of the stream containing HCl, the process from that point forward is basically the same. The gaseous stream containing HCl is routed to an HCl recovery absorption column, where the HCl is absorbed into either water or dilute HCl. The liquid leaving this column contains concentrated HCl.

The gaseous stream leaving the absorption column contains HCl that was not absorbed into the liquid in the tower and any  $\text{Cl}_2$  present in the inlet stream. This outlet stream may be routed (or recycled) to another process, in which case it is no longer part of the HCl production affected source. However, if the outlet stream is directly discharged to the atmosphere or if it is routed through

other recovery/control devices before being discharged to the atmosphere, it is considered an HCl process vent from an HCl production facility.

If the liquid HCl leaving the absorption tower is routed to an HCl storage tank, there is the potential for HCl emissions from the tank. The storage tanks are typically atmospheric storage tanks, and working loss emissions will occur as the tank is filled and emptied. While less significant, there are also breathing losses from atmospheric temperature and pressure changes. There is also the potential for emissions when HCl is loaded from a storage tank to a tank truck, rail car, ship, or barge. Plants often reduce HCl emissions from HCl storage tanks and HCl transfer operations by using a scrubber.

Another potential source of HCl emissions is fugitive losses from equipment leaks. Owners and operators of HCl production processes presumably have an incentive to identify and repair equipment leaks of HCl and  $\text{Cl}_2$  because of their highly corrosive nature. The leaks can be easily identified, as the presence of ambient moisture (humidity) results in rapid corrosion on or around leaking equipment components.

The bottoms from scrubbers used to reduce HCl and  $\text{Cl}_2$  emissions from HCl process vents, HCl storage vessels, and HCl transfer operations are typically routed to wastewater



treatment systems. In most cases, the HCl or Cl<sub>2</sub> has been chemically converted in the scrubber to sodium hypochlorite (bleach). Any residual Cl<sub>2</sub> or HCl would be quite small. We estimate that wastewater emissions represent less than 1 percent of total emissions from the source category. Therefore, we believe that wastewater streams do not represent a significant potential source of emissions.

## 2. Estimated Emissions

We have calculated the nationwide baseline emissions for each of the HCl production facility emission sources. Hydrochloric acid process vents emit a total of 2,240 Mg/yr (2,470 tpy) of combined HCl (1,600 Mg/yr; 1,770 tpy) and Cl<sub>2</sub> (640 Mg/yr; 700 tpy) emissions. Hydrochloric acid storage tanks emit 230 Mg/yr (260 tpy) of HCl, HCl transfer operations emit 27 Mg/yr (30 tpy) of HCl, leaking equipment emits 410 Mg/yr (450 tpy) of HCl, and wastewater emits 9 Mg/yr (10 tpy) HCl. Total baseline HAP emissions from the industry are 2,910 Mg/yr (3,220 tpy).

### C. What is the affected source?

The final rule defines the affected source as the group of one or more HCl production facilities at a plant site that are subject to the final rule, and all associated wastewater operations. The affected source contains emission streams from the following: HCl process vents, HCl storage tanks, HCl transfer operations, leaks from equipment

in HCl/Cl<sub>2</sub> service, and HCl wastewater operations. However, there are no emission limitations or other requirements for HCl wastewater operations in the final rule.

D. What are the emission limitations and work practice standards?

Existing affected sources must reduce HCl and Cl<sub>2</sub> emissions from each HCl process vent by 99 percent or to outlet concentrations of 20 parts per million by volume (ppmv) HCl and 100 ppmv Cl<sub>2</sub>, determined using EPA Test Method 26A of 40 CFR part 60, appendix A. New sources must reduce HCl and Cl<sub>2</sub> emissions from each HCl process vent by 99.4 and 99.8 percent, respectively, or to outlet concentrations of 12 ppmv HCl and 20 ppmv Cl<sub>2</sub>. The final rule also requires that owners or operators establish site-specific operating limits for each control device, based on monitored parameters and levels established during the performance test. For example, if you use a caustic scrubber to meet the emission limits, you must maintain the daily average scrubber inlet liquid flow rate above the minimum value established during the performance test. You also must maintain the daily average scrubber effluent pH within the operating range value established during the performance test.

For each storage tank and transfer operation at an existing affected source, HCl emissions must be reduced by

99 percent or to an outlet concentration of 120 ppmv; the operating limits are the same as for process vents. There are no  $\text{Cl}_2$  emissions from these sources. For each storage tank at a new affected source, HCl emissions must be reduced by 99.9 percent or to an outlet concentration of 12 ppmv. For each transfer operation at a new affected source, HCl emissions must be reduced by 99 percent or to an outlet concentration of 120 ppmv. Emission streams from the following types of storage tanks and transfer operations are exempt from these emission limitations: (1) storage tanks that never store liquid HCl product with a concentration of 30 weight percent or greater, and (2) transfer operations that never load liquid HCl product with a concentration of 30 weight percent or greater.

For leaking equipment, the final rule includes a work practice standard. We require you to prepare, and at all times operate according to, an equipment leak detection and repair (LDAR) plan that describes in detail the measures that will be put in place to control leaking equipment emissions at the facility. You are required to submit the LDAR plan to the Administrator. You are also required to certify in your Notification of Compliance Status that you have developed and implemented the LDAR plan and submitted the plan to the Administrator.

There are no emission limitations or work practice standards for HCl wastewater operations.

E. What are the performance testing, initial compliance, and continuous compliance requirements?

For HCl process vents at new and existing affected sources, you are required to demonstrate initial compliance by conducting a performance test that demonstrates that the emission limitations are being met. You are required to conduct subsequent performance tests on the earlier of your title V operating permit renewal or within 5 years of issuance of your title V permit.

You must also establish site-specific operating limits based on control device parameters. These operating limits will be established for each parameter based on monitoring conducted during the performance test. Specifically for water or caustic scrubbers, which we believe will be the most commonly used control device, the final rule requires that you establish operating limits for pH of the scrubber effluent and the scrubber liquid inlet flow rate. For any other type of control device, you are required to establish the operating limits based on a site-specific monitoring plan that identifies appropriate parameters. Continuous compliance will be demonstrated by these monitored parameters staying within the operating limits.

For HCl storage tanks and HCl transfer operations at new and existing affected sources, you are required to demonstrate initial compliance by conducting a performance test that demonstrates that the emission limitations are being met. Alternatively, in lieu of conducting initial or subsequent performance tests for HCl storage tanks and HCl transfer operations that are not routed to a control device that also controls HCl process vent emissions or any other continuous vent stream, you may conduct a design evaluation which demonstrates that the control technology being used achieves the required control efficiency when a liquid HCl product with a concentration of 30 weight percent or greater is being loaded into the storage tank, or a tank truck, rail car, ship, or barge. The schedule for subsequent performance tests and the operating limits for new and existing HCl storage tanks and HCl transfer operations are the same as those for HCl process vents.

F. What are the notification, recordkeeping, and reporting requirements?

The final rule requires owners or operators of affected sources to submit the following notifications and reports:

- Initial Notification.
- Notification of Intent to Conduct a Performance Test.
- Notification of Compliance Status (NOCS).

- Compliance Reports.
- Startup, Shutdown, and Malfunction (SSM) Reports.

The final rule requires that each owner or operator maintain records of reported information and other information necessary to document compliance (for example, records related to malfunctions, records that show continuous compliance with emission limits) for 5 years.

For the Initial Notification, the final rule requires that each owner or operator notify us that his or her facility is subject to the HCl Production NESHAP and that he or she provide specified basic information about their facility. For new or reconstructed sources, this notification (or an application for construction or reconstruction) would be required to be submitted no later than 120 calendar days after the facility becomes subject to this subpart. For existing sources that are operating at this time, the Initial Notification would be due [120 DAYS AFTER PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER].

For the Notification of Intent report, the final rule requires that each owner or operator notify us in writing of the intent to conduct a performance test at least 60 days before the performance test is scheduled to begin.

For each new or existing HCl process vent, HCl storage tank, and HCl transfer operation at an affected source, the

final rule requires a performance test to demonstrate compliance with the HCl concentration limit. This test must be conducted within 180 days of the compliance date for new and existing sources. The final rule requires that the NOCS report be submitted within 60 days of completion of the performance test. A certified notification of compliance that states the compliance status of the facility, along with supporting information (e.g., performance test methods and results, description of air pollution control equipment, and operating parameter values and ranges), must be submitted as part of the NOCS.

For the Compliance Report, the final rule requires that facilities subject to control requirements under the final rule report on continued compliance with the emission limits and operating limits semi-annually. Specifically, the compliance report must contain the following information:

- Company name and address.
- Statement certifying the truth, accuracy, and completeness of the content of the report.
- Date of report and beginning and ending dates of the reporting period.
- Information on actions taken for any startups, shutdowns, or malfunctions that were consistent with your SSM plan.

- If there are no deviations from any emission limitations that apply to you, a statement that there were no deviations from the emission limitations during the reporting period.
- If there were no periods during which the continuous monitoring system (CMS) was out-of-control, as specified in the monitoring plan, a statement that there were no periods during the which the CMS was out-of-control during the reporting period.

You will demonstrate initial compliance with the work practice standards for leaking equipment by certifying that you have developed and implemented a LDAR plan and submitted the plan to the Administrator. Your semiannual compliance report will verify your continued use of the plan and contain information on instances where you deviated from the plan and the corrective actions taken.

Finally, you must submit an immediate SSM report if you have taken an action that is not consistent with the facility's SSM plan. This report must describe actions taken for the event and contain the information in 40 CFR 63.10(d)(5)(ii).

### **III. Significant Comments and Changes Since Proposal**



This section includes discussion of significant comments on the proposed rule, particularly where we have made changes to address those comments in the final rule. These changes may be separated into three basic categories: applicability, the MACT determination, and performance testing and compliance. This section is organized according to these three topic areas. For a complete summary of all the comments received on the proposed rule and our responses to them, refer to the "National Emission Standards for Hazardous Air Pollutants (NESHAP) for the Hydrochloric Acid Production Industry: Summary of Public Comments and Responses" in Docket ID No. OAR-2002-0057. The docket also contains the actual comment letters and supporting documentation developed for the final rule.

A. What sources are subject to MACT?

The proposed rule indicated that HCl production facilities at major sources were subject to the final rule. An HCl production facility was defined as the "collection of equipment used to produce, store, and transfer for shipping liquid HCl product at a concentration of 10 percent by weight or greater."

There were numerous comments provided on these applicability provisions. First, several commenters were confused by the apparent contradiction between the definition of an HCl production facility in the proposed

rule and the description in the preamble. The proposed rule language stated that a facility must produce, store, AND transfer HCl in order to be considered an HCl production facility, while the preamble indicated that production of HCl is the only required element for a collection of equipment be considered an HCl production facility. A few commenters argued that all three elements should be necessary for a process to be an HCl production facility, but most only requested clarification. Our intent was that described in the proposed preamble - that is, a facility only needs to produce liquid HCl product to be considered an HCl production facility. The language in the final rule is clear that processes that produce liquid HCl product are HCl production facilities and subject to the final rule (provided that criteria related to the concentration of HCl in the liquid product and the level of production are met), whether or not they store and transfer the liquid HCl.

As discussed at length in the proposed preamble, it was our intent to separate commercial-level HCl production, which we believe should be subject to the final rule, from incidental production, which we do not believe should be subject. Several comments were received that helped us make this distinction. First, numerous commenters requested that the EPA raise the minimum HCl concentration for an HCl production facility from 10 weight percent to a level that

better represents commercial production of HCl. The commenters stated that liquid HCl is commonly produced for commerce at 20° to 22° Baume (Bé) acid strength (31.45 to 35.2 weight percent). However, one commenter's HCl production facility occasionally produces liquid HCl product less than 20 weight percent. Additionally, the commenters made the argument that emissions resulting from a 10 percent HCl product were less, even without controls, than the proposed emission limitations. Specifically, they pointed out that the equilibrium HCl vapor concentration for a 10 weight percent HCl liquid (10.7 ppmv at 25°C) is lower than the proposed emission limitation for process vents, storage tanks, and transfer operations (12 ppmv).

Upon consideration of these comments and the supporting information, we changed the minimum HCl concentration to 30 weight percent. The final rule states that an HCl production facility that produces a liquid HCl product at a concentration of 30 weight percent or greater is subject to the final rule. That means that this unit is subject at all times, even those times when a liquid HCl product of a lower concentration is being produced. Therefore, the final rule will cover facilities like the one pointed out by the commenter that occasionally produce liquid HCl product at concentrations less than 30 percent, even when those lower concentration products are being produced.

However, we wanted to ensure that facilities that primarily produce lower concentration liquid HCl products not be subject to the final rule. Therefore, we added a statement in 40 CFR 63.8985(a) that the final rule does not cover HCl production facilities that only occasionally produce liquid HCl products at a concentration of 30 weight percent or greater. We did not, however, include a specific definition of what constitutes occasional production. If a facility produces liquid HCl with a concentration of 30 weight percent or greater during its normal operations, this would not be considered occasional production.

Commenters also suggested facility-wide exemptions based on *de minimis* annual emissions. Commenters provided several exemption levels based on emissions, from 1.8 kilograms per hour to 10 Mg per year. Other commenters believed that an exemption based on production was the appropriate method to eliminate burdensome compliance requirements for facilities with very low HAP emissions. The recommended exemption production levels ranged from 1 Mg per year to 1 gigagram per year.

We believe that, with the 30 weight percent criteria, the final rule should not cover incidental production of HCl. Consequently, we have not added either an emissions-

based exemption or a production-based exemption to the final rule.

Commenters also requested that we clearly delineate where the HCl production facility ends and HCl consumption begins so as not to include equipment unrelated to the production of HCl. While the proposed rule was not specific as to the beginning of an HCl production facility, the proposed preamble did indicate that an HCl production facility begins at the point where the gaseous stream containing HCl enters the absorber. The commenters agreed with this concept and asked that we directly incorporate it into the final rule, which we did.

Most of the problems cited by commenters related to the end of the HCl production facility were remote storage tanks that are dedicated to another process or to wastewater treatment. There was also concern expressed about whether off-site HCl storage tanks storing HCl produced in a subject unit would be subject to the final rule. One suggestion was that the HCl production facility include only those tanks and transfer operations on the site that are directly connected to the production unit. Another suggestion was to only include the first storage tank after the absorber production unit and the first transfer rack. Other commenters pointed out that the proposed rule would also cover HCl storage tanks and transfer operations that handled

purchased HCl that was not even produced in the on-site HCl production facility.

In general, we agree with the commenters on this topic. We believe it is practical that only the primary storage tanks and transfer operations that are storing and loading HCl produced at the site should be subject to the final rule. However, we did not totally agree with either of the suggestions provided by the commenters. In the final rule, we specify that the HCl production facility includes the production unit and all storage tanks that contain liquid HCl product that is produced in the HCl production unit, along with all transfer operations that load HCl product produced in the HCl production unit. Further, it also specifies that the piping and other equipment used to transfer liquid HCl product from the HCl production unit to the storage tanks and/or transfer operations is included in the HCl production facility. The final rule clarifies that the HCl production facility ends at the point that the liquid HCl product produced in the HCl production unit either leaves the plant site via a tank truck, rail car, ship, barge, or pipeline, or enters another process on the plant site. However, we recognized that this still was not totally clear regarding remote storage tanks, so we specifically added exemptions for HCl storage tanks that are dedicated feedstock tanks for other processes and storage

tanks which store HCl dedicated for use in wastewater treatment.

Commenters also pointed out that the proposed preamble was clear that the type of process covered by the final rule was one that routes a gaseous stream that contains HCl to an absorber. They asked that this language, which was not included in the proposed rule, be added to the final rule. The commenters acknowledged that there are other methods of producing liquid HCl product, but believe that they should not be covered by the final rule because they were not considered in the final rule development. We agreed and made changes in accordance. These changes include the addition of a definition of HCl production unit that only includes an absorber or other vessel in which a liquid HCl product is manufactured by absorbing gaseous HCl into either water or an aqueous HCl solution and the change cited above related to the beginning of an HCl production facility.

Commenters requested that facilities that produce liquid HCl only for on-site usage be exempted. We certainly support the recycling and re-use of potential waste materials, including HCl. Further, we are aware that much of the HCl produced is used by other processes on the plant site. However, we do not see a distinction between these processes and other processes where the HCl product is truly sold. We believe an exemption for on-site use would

unfairly favor large integrated facilities. Consider two similar HCl processes with similar equipment, similar production capacities, and similar emissions potential. We do not believe that distinguishing between these processes based on where the HCl is consumed is warranted.

Even with the extensive discussions in the proposed preamble related to how the applicability is blind to the type of process that generates the anhydrous HCl stream that forms the feed stream for the HCl production facility, some commenters still called for exemptions for processes where HCl is not the primary product. The primary product concept is not relevant to the final rule, as the only processes that are subject to the final rule are those that intentionally manufacture liquid HCl product. There are a variety of types of processes that generate HCl-containing gas streams that provide the feed to the HCl production unit, and we recognized that this gaseous HCl is often a by-product. However, at the point an owner or operator takes this stream and manufactures a commercial level (i.e., 30 weight percent or greater) liquid HCl product, we maintain that HCl is the intended product for that unit. Therefore, the process that creates the anhydrous HCl stream feeding the HCl production facility is not relevant in most situations.



The only time that the up-stream process is relevant is when it is subject to a Federal regulation that also regulates the HCl and Cl<sub>2</sub> emissions from the downstream HCl production facility. At proposal, we identified several of these situations and specifically exempted the HCl production facilities subject to these other standards. While all commenters applauded this concept, they did not feel that we had gone far enough with these exemptions. Some commenters cited other specific regulations that should be listed, while others requested that we broaden the exemption to include facilities subject to any other NESHAP, whether it is already promulgated or yet to be promulgated, along with any facility that is subject to any federally enforceable permit that requires 95 percent reduction or greater.

Just like the commenters, we are interested in avoiding overlapping situations where a process that produces HCl might be subject to more than one Federal regulation. Based on the comments received, we have added exemptions for processes subject to the Pharmaceutical MACT (40 CFR 63, subpart GGG) and 40 CFR 63.994 of subpart SS. We have also expanded the exemption to include any process required by another rule to comply with 40 CFR 63.113(c) of the HON. In addition, according to our proposed decision not to regulate Cl<sub>2</sub> and HCl emissions from chlorine production (67 FR 44713;

July 3, 2002), we consider direct synthesis HCl production units directly associated with chlor-alkali facilities to be part of the chlor-alkali facilities. Therefore, an exemption has been added in the final rule to exempt direct synthesis HCl production processes that are part of chlor-alkali facilities; this exemption does not extend to HCl production facilities that are co-located with chlor-alkali facilities but are not direct synthesis units directly associated with chlor-alkali facilities. So, we exempted all the specific situations raised by commenters. However, we cannot include a generic exemption for any other NESHAP or any federally enforceable permit. The statutory requirements in CAA section 112(d) are prescriptive regarding the level of control required by MACT standards, and we could not be assured that these other requirements would meet the minimum requirements for this source category. We will consider such situations on a case by case (i.e., on a source-specific) basis under a request for an alternative non-opacity emission standard submitted in accordance with 40 CFR 63.6(g).

As part of our consideration of overlapping requirements, we reviewed the situation with the HON. The proposed rule exempted HCl production units located after an incinerator of a HON unit where the HCl and Cl<sub>2</sub> emissions are subject to 40 CFR 63.113(c). However, we did not exempt

situations where gaseous HCl is produced as a by-product in a HON unit and then routed to an absorber to produce liquid HCl. In these by-product situations, the HCl and Cl<sub>2</sub> emissions are not covered by the HON. While we agree that the situation where the same equipment and the same emission stream could be subject to both the HON and the HCl Production NESHAP is not ideal, we believe that these inorganic emissions should be addressed under the final rule in the same manner that comparable non-HON units are addressed. Therefore, the final rule continues to reach into the HON to cover those inorganic emissions from liquid HCl production.

Several commenters requested that the EPA exempt storage tanks that are smaller than a certain capacity. The commenters pointed out that the potential emissions from small storage tanks are low while the control costs are very high. Commenters suggestions for a minimum capacity ranged from 15,000 to 20,000 gallons. One commenter further requested an exemption for all portable storage containers (e.g., drums, tank trucks, railcars). Another commenter suggested that tank capacity and HCl vapor pressure be used together to determine which storage tanks should be exempt.

We understand the commenters' concern about the cost of controlling emissions from small storage tanks. However, we believe that small storage tanks are not likely to be

covered by the final rule given the other changes that we have made which were based on comments received. We have exempted storage tanks that never store liquid HCl product with a concentration of 30 weight percent or greater. We have also defined the HCl production facility such that storage tanks that store HCl for use in wastewater treatment or as feedstock for another process are not part of the HCl production facility. Therefore, we have not added an exemption for small storage tanks.

B. How did the EPA determine MACT?

1. Data Used to Determine MACT

Many commenters stated that the EPA did not use data that was truly representative of the sources in the source category when determining the MACT emission limitations. The commenters believed that the database used to prepare the proposed rule contained facilities that potentially would not be subject to the final rule and did not contain many facilities that potentially would be subject to the final rule. This criticism included the estimate of the number of facilities potentially subject to the final rule, but was more focused on the data used to establish MACT.

Commenters stated the number of sources subject to the final rule would likely be much greater than the 64 plant sites that we identified as potentially subject at proposal.

One commenter estimated that the number of plant sites could be as high as 300.

The commenters were especially concerned with the representativeness of the data set used to establish the MACT emission limits. They maintained that the lack of representativeness of the source category resulted in proposed emission limitations that were not adequately justified for the HCl production source category, and that the use of more representative data could change the MACT determination. A few of the commenters specifically requested that we gather data from a more representative group of potentially affected facilities and re-calculate the MACT floor. One commenter even went so far as to state that we should withdraw the proposed rule and re-propose it after properly surveying the industry and re-calculating the MACT floor based on accurate data.

First, we will briefly review the process used to obtain the information for the HCl production source category, followed by responses to the specific issues raised by the commenters.

In creating our list of sources in the HCl production source category, we consulted reliable and well-respected sources of information on the chemical industry. We removed plant sites from the original list that we believed would be subject to other MACT standards or Federal regulations.

There were also a few plants that we were aware of through contacts with State agencies that were not on the original list, so they were added. That resulted in the 64 plants identified at proposal. We recognized the special difficulty in identifying all HCl production facilities, since HCl is often produced from by-product streams only for internal uses, and considered that our list may not have been comprehensive. Therefore, during a meeting held on February 28, 2001 with the primary trade organization for the HCl production industry, we specifically requested assistance in improving our initial list of potentially subject plant sites. However, no additional information resulted from this request for assistance.

While commenters claim that there could be potentially two or three times more plant sites subject to the HCl Production NESHAP than we originally estimated, there was little actual information provided to support this claim. Where commenters provided specific plant names and locations, we adjusted the list of plant sites. We also identified a few inconsistencies and overlaps from our original list. The result was that the revised list of potentially subject facilities contains 65 plant sites.

As was documented in several items in the docket, our information gathering approach for this source category was to obtain available information from State/local agencies in

States where HCl production facilities are located. That resulted in data for 24 HCl production facilities at 19 plant sites in 5 States. In addition, we had information from site visits to 6 additional HCl production facilities at 5 more plant sites, meaning that the MACT database relied upon for the proposed rule contained information representing 30 HCl production facilities at 24 plant sites in 9 States. We believe that this was a reasonable approach to obtain information for this industry.

Some commenters requested that we distribute a questionnaire under our CAA section 114 authority to accurately reflect the source category. However, the commenters did not provide a list of plants to whom this questionnaire should be sent to ensure that the data were more representative than the data set we obtained from State agency files. Some commenters, however, did offer to provide additional information for their HCl production facilities, which could have resulted in data for a few additional processes. However, we concluded that the original data set was adequate to determine MACT and did not feel it was necessary to burden the industry with a data collection request.

Commenters also complained that many of the plants considered in the MACT floor analysis were actually plants that are not in the source category. These commenters are

correct, in part, in that we did utilize data from two plants that we had removed from the original list because we presumed that these HCl production processes were, or would be, subject to another MACT standard. To eliminate this inconsistency, we have removed these two facilities from the MACT analysis. We also adjusted the data set based on all specific comments received. Therefore, the revised MACT floor analysis is based on facilities that, to the best of our knowledge, are in the source category. For example, we have removed from the MACT floor analysis all HCl production facilities that produce HCl via direct synthesis at chlor-alkali facilities, and we have kept in the MACT floor those HCl production facilities that are co-located with chlor-alkali facilities but are not part of a chlor-alkali facility and produce HCl through some other process.

We would point out that while we did not agree with the commenters regarding the representativeness and adequacy of our MACT database, and we did not undertake an additional data gathering effort after proposal, we did revise our MACT analysis to address many of the other issues raised by commenters regarding the determination of the emission limitations. These are discussed in the next sections.

## 2. MACT Floor Determination

There were a few issues raised related to the MACT floor analysis. First, commenters believed that the floor



should have been based on the top 12 percent of the facilities instead of the top 5 facilities, since there are more than 30 facilities in the category. Commenters also believed that the floor should have been calculated based on the mean and not the median. In addition, commenters objected to how we handled control efficiencies reported as >99 percent (in the floor analysis, units that reported >99 percent efficiency were excluded from the floor calculation and the remaining facilities in the top 5 of the reporting facilities were used to determine the floor) and they pointed out that we were inconsistent in this approach (we did consider these >99 reported efficiencies for the floor for transfer operations).

As noted above, we currently estimate that there are 65 facilities in the source category. Therefore, if data were available for all facilities, the MACT floor would be based on the best-performing 12 percent, or 8 facilities. In our re-analysis of the MACT floor, we considered the control achieved by the best-performing eight facilities in our database. We disagree with the opinion regarding use of the average rather than the median. As was stated in the preamble for the proposed rule, we have determined that average means any measure of central tendency, whether it be the arithmetic mean, median, or mode, or some other measure based on the central tendency of a data set. We continue to

believe that this determination, which we originally published over 8 years ago (59 FR 29196; June 6, 1994), is sound. For the MACT determination for this source category, which was in the format of a percent emission reduction, we determined that selection of the median value was most appropriate. This ensured that a control efficiency actually being achieved was selected, rather than the mean of values, which would not likely have represented the actual performance of an actual control device.

The commenters were correct in that we were inconsistent in how we considered facilities that reported control efficiencies as >99 percent. For process vents and storage tanks, we did not include data points reported as >99 percent when calculating the MACT floor for the proposed rule, whereas for transfer operations we did include data points reported as >99 percent when calculating the MACT floor because we had only three data points, two of which reported >99 percent. In evaluating this issue, we determined that it was inappropriate to have not considered some of the most effective controls in the source category for process vents and storage tanks simply because their efficiencies were reported as greater than a particular number. Therefore, in our re-analysis of the MACT floor, we assigned a numerical value of 99 percent emission reduction to each control device that reported an efficiency of >99

percent or  $\geq 99$  percent. The data points reported as  $>99$  percent or  $\geq 99$  percent were obtained from permit applications, and we had no data that indicated more specific control efficiencies in these cases. We believe that rounding these data points down to 99 percent represents the closest actual control efficiency that we are sure these sources could meet consistently.

Due to the comments raised regarding the MACT floor approach and the data used, it was necessary to re-evaluate the MACT floor. As a reminder, the MACT floor addressed HCl emissions from process vents, storage tanks, and transfer operations, and  $\text{Cl}_2$  emissions from process vents. Further, the proposed format of the MACT floor for all emission sources was a percent reduction. We determined the MACT floor for existing sources as the median value of the top eight facilities in the data set for each type of emission source.

The revised MACT floors for existing sources are 99 percent emission reduction for HCl emissions from process vents and transfer operations, 99 percent for  $\text{Cl}_2$  emissions from process vents, and 98.5 percent for HCl emissions from storage tanks. For consistency, we believe it is appropriate to round the storage tank value to 99 percent. The revised MACT floors for new sources are 99.4 percent emission reduction for HCl emissions from process vents,

99.8 percent emission reduction for  $\text{Cl}_2$  emissions from process vents, 99.9 percent emission reduction for HCl emissions from storage tanks, and 99 percent emission reduction for HCl emissions from transfer operations. These new source MACT floors are based on the level of control achieved by the best-controlled source in the category.

### 3. Emission Limitations and Work Practice Standards

The proposed emission limitations were in the format of an outlet concentration. As outlined in the proposed preamble, we selected this format primarily due to concerns in distinguishing an HCl control device from an HCl production process. There were numerous comments received regarding this format and the data used to establish the emission limit. These proposed limits were developed by applying the MACT floor percent reduction efficiencies to the highest uncontrolled concentrations in the data set. Specifically, these highest uncontrolled concentrations were 2,044 ppmv for HCl and 9,650 ppmv for  $\text{Cl}_2$ . Commenters stated that we established the concentration equivalents to the MACT floor based on data that do not accurately reflect the variability of sources in the source category. The commenters noted that facilities in the source category often have emission points (with only one exception, all examples raised by the commenters were for storage tanks and transfer operations) that emit much higher concentrations of

HCl and Cl<sub>2</sub> or emit at much higher air flow rates than the facilities included in the our database. The commenters stated that emission points with high concentrations would need removal efficiencies greater than the MACT floor levels in order to meet the proposed concentration limits, which we proposed as being equivalent to the MACT floor percent removal efficiencies. Therefore, the commenters maintained that the proposed emission limits were far beyond the MACT floor and not justified.

Alternatively, one commenter stated that the proposed emission limits were not as stringent as they should be. The commenter stated that the MACT floor control efficiencies are appropriate, but that they were inappropriately converted to equivalent concentration limits. The commenter stated that we chose as equivalent to the MACT floor control efficiency the highest concentration from the range of concentrations that are already being achieved and noted that recent court decisions reiterate that we must set the MACT floor at the average already being achieved by the best performing 12 percent of the sources, not at a level at which all sources can easily meet. The commenter urged us to establish emission limits that are appropriately stringent based on the MACT floor control efficiencies. Commenters offered three basic suggestions on how to deal with this perceived problem. Several commenters

requested that we collect and examine inlet concentration data from a variety of additional process vents, storage tanks, and transfer operations, and develop emission limits that are more appropriate to the actual inlet concentrations observed in the source category.

In the absence of more data, commenters encouraged us to establish a tiered control efficiency based on flow rate. That would avoid the situation in which already well-controlled scrubbers with high air flow rates incur a high additional cost to achieve the proposed concentration limit. The final suggestion by several commenters was that we allow compliance with either a control efficiency or an emission limit, whichever is less stringent. The commenters stated that such an alternative would relieve the situation where control devices have high removal efficiencies but cannot meet the proposed concentration limits because they have high inlet concentrations.

First, we reject the commenter's opinion that additional data are needed to establish these concentration equivalents. As discussed above, we believe that our data gathering approach was sound and are not convinced that additional data gathering would necessarily result in data that better characterizes the industry.

However, we recognize that none of the data used to establish the concentration equivalents were from storage

tanks or transfer operations. We agree that uncontrolled concentrations from storage tanks and transfer operations are likely to be much higher than those for the process vents in our data set because HCl remains in storage tanks and transfer operations long enough for the concentration in the vapor to reach equilibrium with the concentration in the liquid, whereas HCl passes through HCl production units quickly. We would expect that, in many cases, the vapor space in storage tanks and transfer operations will be saturated. As discussed above, we have revised the HCl production facility definition to include production of liquid HCl at a concentration of 30 weight percent or greater. At saturation, the HCl vapor concentration above a 30 weight percent HCl liquid would be around 12,000 ppmv. Applying the existing source MACT floor reduction efficiencies (99 percent for storage tanks and for transfer operations) to this concentration results in an outlet concentration of 120 ppmv. Applying the new source MACT floor reduction efficiencies (99.9 percent for storage vessels and 99 percent for transfer operations) to this concentration results in an outlet concentration of 12 ppmv for storage tanks and 120 ppmv for transfer operations. These are the emission limitations for storage tanks and transfer operations in the final rule.

With one exception, the comments did not indicate that the uncontrolled concentrations used to determine the emission limitations for process vents (2,044 ppmv for HCl and 9,650 ppmv for Cl<sub>2</sub>) were inappropriate. Therefore, we applied the revised existing source MACT floor control efficiencies (99 percent for both HCl and Cl<sub>2</sub> emissions from process vents) to these concentrations to obtain 20 ppmv HCl and approximately 100 ppmv Cl<sub>2</sub>. Applying the new source MACT floor reduction efficiencies (99.4 percent for HCl emissions from process vents and 99.8 percent for Cl<sub>2</sub> emissions from process vents) to this concentration results in outlet concentrations of 12 ppmv HCl and 20 ppmv Cl<sub>2</sub> (rounded up from 19 ppmv). These are the emission limitations for process vents in the final rule. We believe instances cited by one commenter regarding inlet Cl<sub>2</sub> concentrations in process vents would be addressed by the alternative format in the final rule, which is discussed below.

We disagree with the commenter who believed that the emission limitations were not as stringent as they should be. The percent reduction limits represent the average control level of the best-controlled sources, in accordance with CAA section 112(d)(3). The alternative concentration limits were determined using the appropriate percent reduction limits (which were based on the average of the



best-controlled sources) and the available data on control device inlet concentrations. In determining the concentration limits, we made assumptions about these inlet concentrations for each type of emission source (for example, we chose the highest concentration) to consider the variability that will be encountered by the best-performing sources. We strongly disagree that all sources can easily meet these limits, and we believe that significant control measures will be required for facilities to meet the limits.

We do not believe that a tiered control efficiency based on flow rate is appropriate based on the available information, and we did not incorporate such a concept into the final rule. We do recognize, nevertheless, that situations could exist where sources could achieve the MACT floor reduction efficiency but fail to meet the applicable outlet concentration emission limitations. Further, the commenters alleviated our concerns at proposal regarding a percent reduction emission limit. We were concerned that it would be difficult to determine how and where to measure a control efficiency but commenters alleviated this concern by stating that the HCl production unit is distinguishable from the control device, which makes it clear where to measure the control device inlet and outlet in order to calculate a control efficiency over the control device. Therefore, we have incorporated the third suggestion of the commenters

(compliance with either a control efficiency or a concentration limit) into the final rule. Owners or operators will have the option of complying with a percent reduction efficiency instead of the outlet concentration limitation. For storage tanks and transfer operations, the percent reduction and concentration limit are equivalent assuming that a 30 weight percent liquid HCl product is stored in the tanks or used in the transfer operations. For process vents, the percent reduction and concentration limits are equivalent assuming process vent outlet concentrations of approximately 2,000 ppmv HCl and 10,000 ppmv Cl<sub>2</sub>. These outlet concentrations were assumed in order to take into account the variability of outlet concentrations from HCl process vents. The percent reduction will be measured across the control device, or series of control devices, that follow the absorber production unit, storage tank, or transfer rack. We have added definitions of HCl production unit and control device to ensure that there is no confusion regarding where the percent reduction must be measured.

Comments were received on whether transfer operations and wastewater operations should have emission limitations. We were asked to reconsider the need to set emission limitations for transfer operations because emissions from transfer operations contribute less than one percent of the

total emissions from HCl production facilities and because most transfer operations at HCl production facilities are already controlled. There was complete agreement, however, that our decision not to establish emission limits or work practice standards for wastewater treatment operations was appropriate.

We are obligated to set emission limitations at least as stringent as the MACT floor, which we are required to establish based on the average emission limitation achieved by the best-performing existing sources, regardless of the percentage of total emissions attributable to the specific equipment or process. This principle was applied for both transfer operations and wastewater. For transfer operations, the available information is consistent with the commenter's statement that "most transfer operations are already controlled." Therefore, we are required to establish limits requiring control based on the best performing sources. We did not identify any controls for emissions from wastewater, or any process modifications or other pollution prevention type measures that reduce HCl emissions from wastewater. For the reasons discussed in the preamble to the proposed rule, we determined that the new and existing source MACT floors for wastewater were no emissions reductions (66 FR 48181-48182; September 18, 2001). Therefore, the final rule does not require any

controls or other measures even though wastewater operations are part of the affected source.

Similarly, in developing the proposed rule, we determined that the MACT floor for leaking equipment is a general plan to detect and repair leaks of HCl because most HCl production facilities are already performing LDAR activities. The response received on these proposed requirements varied.

Several commenters agreed with our basic proposed approach to require the development and implementation of a site-specific plan, rather than to include more formal requirements in the final rule. However, there was great concern regarding the proposed requirement to submit the plan to a permitting authority for review and approval. The commenters stated that they are not aware of any NESHAP that requires LDAR plans to be submitted for approval, and that requiring these plans to be submitted for approval effectively makes them part of a facility's title V operating permit and, consequently, implementation of the initial plan and any changes to the plan would require a formal permit amendment. They claimed that this would be very time consuming and an unnecessary burden. The commenters noted that the proposed rule did not address how the plan is to be approved, and requested that, if the requirement to submit the plan is not eliminated, the EPA

provide criteria for permitting authorities to use in reviewing LDAR plans. The commenters asserted that eliminating the requirement to submit LDAR plans alleviates the burdens associated with title V permits and also allows informal or routine maintenance programs to constitute the LDAR plan.

One commenter proposed that we include very simplified requirements in the final rule (e.g., if you detect a leak, repair it within 15 days). Others argued that the EPA should eliminate any and all references to an LDAR plan from the final rule.

First, in light of the fact that most, if not all, HCl production facilities already have programs to reduce emissions from equipment leaks at HCl production facilities, we cannot eliminate the requirement to establish a floor and control emissions from equipment leaks. We also believe it is important that LDAR plans be submitted to the Administrator to facilitate enforcement of the final rule and public access to non-confidential plan requirements, and the final rule retains the proposed requirement for submittal. However, in response to the commenters' concerns, we have eliminated the proposed requirement that LDAR plans be affirmatively approved. Instead, we have clarified that any deficiencies in LDAR plans must be promptly corrected upon request by the Administrator, in

order to allow the Administrator to review and approve LDAR plans if the Administrator so chooses.

Moreover, we do not intend that the contents of a LDAR plan itself must be included in a facility's title V permit. Rather, like other requirements of the final rule, the requirements to develop, implement, and submit a LDAR plan to control emissions from equipment leaks - but not the contents of the plan - are applicable requirements under title V and must be reflected in a facility's title V operating permit. We have clarified that you may incorporate by reference into your LDAR plan existing manuals that describe LDAR activities required under other federally enforceable rules, provided that copies of all manuals that are incorporated by reference are submitted to the Administrator. We are also requiring that a current copy of the plan be maintained on site, and that previous versions be maintained on site for a period of 5 years after any revision of the plan.

C. What are the performance testing and other compliance provisions?

Several changes were made in the final rule related to the performance testing and other compliance provisions. First, commenters objected to the proposed annual performance testing requirement. They stated that the initial performance test is sufficient to demonstrate

initial compliance and establish operating parameter ranges and that monitoring of those parameters is sufficient to demonstrate continuous compliance. The commenters further stated that performance tests are expensive and provide no additional environmental benefit, and that the cost of annual performance tests was not accounted for in the cost impact analysis. We agree with the commenters that it is reasonable to perform subsequent performance tests less frequently than annually and have decided to change the requirement for subsequent performance testing from annually to every 5 years or each time a facility's title V permit is renewed, whichever is more frequent.

There was also objection to the proposed requirement that performance testing be conducted and the NOCS submitted before the compliance date, especially since the General Provisions set deadlines for these activities after the compliance date. We have changed the final rule to conform with the General Provisions. The final rule requires the performance test to be completed within 180 days after the compliance date. The final rule does not change the requirement to submit the NOCS within 60 days after completion of the performance test, because this requirement was already consistent with the General Provisions.

Commenters also said that the performance test requirements in the proposed rule are not appropriate for

storage tanks and transfer operations, primarily because storage tanks and transfer operations are batch operations that do not operate for long enough time periods to conduct three one-hour sampling runs, which were required by the proposed rule. Further, they cited the relatively high expense of such testing, when compared with the small emissions from those sources. Upon review of these comments and the additional information provided, we decided to allow design evaluations as an alternate means of demonstrating both initial and subsequent compliance for storage tanks and transfer operations that are independently controlled (e.g., not routed to a control device that also controls HCl process vent emissions or any other continuous vent stream). The final rule requires that the design evaluation include documentation demonstrating that the control technique being used achieves the required control efficiency when a liquid HCl product with a concentration of 30 weight percent or greater is being loaded into the storage tank, or a tank truck, rail car, ship, or barge.

For process vents, there were proposed limits for both HCl and Cl<sub>2</sub> emissions. Therefore, there were testing requirements for both pollutants. Several commenters disagreed with the proposed requirement that all affected HCl production facilities must conduct performance tests for Cl<sub>2</sub> from process vents. They maintained that we did not



have adequate support to require testing for  $\text{Cl}_2$  and that only facilities that burn  $\text{Cl}_2$  to produce  $\text{HCl}$  would have  $\text{Cl}_2$  emissions.

First, the docket for the final rule does include numerous supporting references for our assertion that  $\text{Cl}_2$  can be emitted from  $\text{HCl}$  production process vents. Of the 21 facilities for which we had emissions data for  $\text{HCl}$  production process vents, 16 reported emissions of  $\text{Cl}_2$ . In fact, 15 of these 16 facilities do not produce  $\text{HCl}$  in a direct synthesis process. However, we acknowledge that there are a variety of processes that produce  $\text{HCl}$ , not all of which have the potential to emit  $\text{Cl}_2$ . Therefore, we have added a provision to the final rule allowing facilities to use process knowledge and previous performance test results to demonstrate that  $\text{Cl}_2$  is not likely to be present in a process vent emission stream. That provision allows facilities to be exempted from the requirement to test process vents for  $\text{Cl}_2$  provided that the appropriate documentation is submitted with the site-specific test plan.

In response to a request that facilities be allowed to use existing performance test data to demonstrate initial compliance in lieu of conducting an initial performance test, we included an allowance in the final rule allowing facilities to use existing performance test data to demonstrate initial compliance for the emission point on

which the test was conducted provided that a three conditions are met. These are: (1) the performance test was conducted within the previous 5-year period; (2) the performance test was conducted using the same test methods required by the final rule; and (3) no modifications have been made to the process or emission point since the previous performance test was conducted or the owner or operator can demonstrate that the results of the performance test, with or without adjustments, reliably demonstrate compliance despite process changes.

Several commenters disagreed with the proposed requirement to submit the site-specific monitoring plan for approval, primarily because, the commenters alleged, requiring submission of the plan would result in the details of the plan being included in a facility's title V permit and, the commenters further alleged, would cause a delay in implementation and modification of the plan because of the lengthy time period typical for approval of elements of a title V permit. It was never our intent that the substantive provisions of a site-specific monitoring plan would become part of a facility's title V operating permit. We have changed the final rule to require the site-specific monitoring plan to be developed, implemented, and submitted to the Administrator, but not subject to the Administrator's approval. We also have clarified that any deficiencies in

site-specific monitoring plans must be promptly corrected upon request of the Administrator, in order to allow the Administrator to review and approve site-specific monitoring plans if the Administrator chooses to do so. A facility's title V permit must contain the final rule's requirement to develop and implement the plan, which is an applicable requirement under title V, but need not incorporate the substantive provisions of the plan itself, even if the Administrator requests the plan to be submitted. We have also added a requirement that a current copy of the plan be maintained on site, and that previous versions be maintained on site for a period of 5 years after the revision of the plan.

Several commenters stated that the detailed operation, inspection, and maintenance requirements for monitoring devices are unnecessary because the final rule requires facilities to develop their own site-specific monitoring plans and requested that we delete the detailed requirements. We had intended for facilities that monitor pH and liquid flow rate to simply incorporate into their site-specific monitoring plans the specific procedures that we included in the proposed rule rather than develop their own procedures. We included specific procedures in the proposed rule because no performance specification had yet

been promulgated for pH or liquid flow monitoring devices. However, we are currently developing performance specifications for continuous monitoring systems that must be followed by owners and operators of all sources subject to standards under 40 CFR part 63. Therefore, we have decided to remove the detailed requirements from 40 CFR 63.9025(b) and (c) of the final rule and wait for the rule that would propose performance specifications for all of 40 CFR part 63. We decided it would be premature to promulgate performance specifications for the final rule when the specifications that would ultimately be promulgated for all of 40 CFR part 63 may be different as a result of possible public comments received on that rulemaking. We did add language in the final rule to require that "all monitoring equipment shall be installed, calibrated, maintained, and operated according to manufacturer's specifications or other written procedures that provide adequate assurance that the equipment would reasonably be expected to monitor accurately." Therefore, owners and operators will be required by the final rule to follow written performance specifications, but not necessarily the ones that we proposed. In addition, the requirement to develop a site-specific monitoring plan, which must include performance specifications, is retained in the final rule as

the mechanism for formalizing the performance specifications.

#### **IV. Summary of the Environmental, Energy, Cost, and Economic Impacts.**

A. What are the air quality impacts?

Nationwide baseline emissions are approximately 2,270 Mg/yr (2,520 tpy) of HCl and 640 Mg/yr (700 tpy) of Cl<sub>2</sub>. The total annual emissions reductions resulting from the final rule are estimated to be approximately 1,050 Mg/yr (1,155 tpy) of HCl and 390 Mg/yr (430 tpy) of Cl<sub>2</sub>.

B. What are the non-air health, environmental, and energy impacts?

We do not expect that there will be any significant adverse non-air health, environmental, or energy impacts associated with the final standards for HCl production plants. The final rule will result in the generation of additional wastewater from scrubbers. We have calculated this amount to be approximately 103,000 gallons per year per process vent scrubber and 500 gallons per year per storage tank/transfer operation scrubber. We estimate that there are 16 facilities that will install new process vent scrubbers and 32 facilities that will install new storage tank or transfer operation scrubbers.

C. What are the cost and economic impacts?

The total estimated capital cost of the final rule for HCl production is approximately \$23.2 million in the fifth year for new and existing sources. The total estimated annual cost of the final rule is around \$8.1 million in the fifth year for new and existing sources, which includes the annualized costs of control and monitoring equipment, other operation and maintenance, and the annual labor to comply with the reporting and recordkeeping requirements of the final rule once the sources are in compliance.

The economic impact analysis, which is a comparison of compliance costs for the affected parent firms with their revenues, shows that the estimated costs associated with the final rule are no more than 1.0 percent of the revenues for any of the 32 affected firms. It is likely that the expected reduction in affected HCl output is no more than 0.01 percent or less from that industry. It should be noted that these results are based on the application of costs from a subset of the affected facilities to the remaining facilities. This is necessary due to incomplete facility-level cost data. Therefore, it is likely that there is no adverse impact expected to HCl producers as a result of implementation of the final rule.

## **V. Administrative Requirements**

### **A. Executive Order 12866, Regulatory Planning and Review**

Under Executive Order 12866 (58 FR 51735; October 4, 1993), the Agency must determine whether the regulatory action is "significant" and therefore subject to Office of Management and Budget (OMB) review and the requirements of the Executive Order. The Executive Order defines "significant regulatory action" as one that is likely to result in a rule that may:

(1) Have an annual effect on the economy of \$100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or tribal governments or communities;

(2) Create a serious inconsistency or otherwise interfere with an action taken or planned by another agency;

(3) Materially alter the budgetary impact of entitlements, grants, user fees, or loan programs, or the rights and obligation of recipients thereof; or

(4) Raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in the Executive Order.

It has been determined that the final rule is not a "significant regulatory action" under the terms of Executive Order 12866 and is, therefore, not subject to OMB review.

B. Paperwork Reduction Act

The information collection requirements in the final rule have been submitted for approval to OMB under the requirements of the Paperwork Reduction Act, 44 U.S.C. 3501 et seq. An Information Collection Request (ICR) document has been prepared by EPA (ICR No. 2032.2), and a copy may be obtained from Susan Auby by mail at the U.S. Environmental Protection Agency, Office of Environmental Information, Collection Strategies Division (2822T), 1200 Pennsylvania Avenue, NW, Washington, DC 20460, by e-mail at [auby.susan@epa.gov](mailto:auby.susan@epa.gov), or by calling (202) 566-1672. A copy may also be downloaded off the internet at <http://www.epa.gov/icr>. The information requirements are not effective until OMB approves them.

The final information requirements are based on notifications, records, and reports required by the General Provisions (40 CFR part 63, subpart A), which are mandatory for all operators subject to national emission standards. These recordkeeping and reporting requirements are specifically authorized under CAA section 114 (42 U.S.C. 7414). All information submitted to the EPA pursuant to the recordkeeping and reporting requirements for which a claim of confidentiality is made will be safeguarded according to Agency policies in 40 CFR part 2, subpart B, Confidentiality of Business Information.



According to the ICR, the total 3-year monitoring, reporting, and recordkeeping burden for this collection is 150,156 labor hours, and the annual average burden is 50,052 labor hours. The labor cost over the 3-year period is \$6,950,959, or \$2,316,986 per year. The annualized capital cost for monitoring equipment is \$25,869. Annual operation and maintenance costs are \$664,622 over 3 years, averaging \$221,541 per year. This estimate includes a one-time plan for demonstrating compliance, annual compliance certification reports, notifications, and recordkeeping.

Burden means the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purpose of collecting, validating, and verifying information; process and maintain information and disclose and provide information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to respond to a collection of information; search existing data sources; complete and review the collection of information; and transmit or otherwise disclose the information.

An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information

unless it displays a currently valid OMB control number. The OMB control numbers for EPA's regulations are listed in 40 CFR part 9 and 48 CFR chapter 15. The OMB control number(s) for the information collection requirements in the final rule will be listed in an amendment to 40 CFR part 9 or 48 CFR chapter 15 in a subsequent Federal Register document after OMB approves the ICR.

C. Regulatory Flexibility Act

The Regulatory Flexibility Act (RFA), as Amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), 5 U.S.C. 601 et seq., generally requires an agency to prepare a regulatory flexibility analysis of any rule subject to notice and comment rulemaking requirements under the Administrative Procedure Act or any other statute unless the Agency certifies that the final rule will not have a significant economic impact on a substantial number of small entities. Small entities include small businesses, small organizations, and small governmental jurisdictions.

For purposes of assessing the impacts of today's final rule on small entities, small entity is defined as: (1) a small business whose parent company has a maximum of 1,000 employees according to Small Business Administration (SBA) size standards (NAICS 325181, Alkalies and Chlorine Manufacturing, and NAICS 325188, All Other Basic Inorganic Chemical Manufacturing); (2) a small governmental

jurisdiction that is a government of a city, county, town, school district, or special district with a population of less than 50,000; or (3) a small organization that is any not-for-profit enterprise that is independently owned and operated and is not dominant in its field.

After considering the economic impact of today's final rule on small entities, I certify that the final rule will not have a significant impact on a substantial number of small entities. In accordance with the RFA, as amended by the SBREFA, 5 U.S.C. 601, et seq., we conducted an assessment of the final rule on small businesses within the industries affected by the final rule. Based on SBA size definitions for the affected industries and reported sales and employment data, we identified 4 affected small businesses out of 32 affected parent businesses (or 13 percent of the total number). In order to estimate impacts to affected small businesses, we conducted a screening analysis that consists of estimates of the annual compliance costs these businesses are expected to occur as compared to their revenues. Since the data are such that costs can only be estimated for a subset of the affected facilities, the available data were used to determine the costs to the facilities outside of this subset. The results of this screening analysis show that all but one of the small businesses are expected to have annual compliance costs of 1

percent or less. For more information, consult the docket for this project.

D. Unfunded Mandates Reform Act

Title II of the Unfunded Mandates Reform Act of 1995 (UMRA), Public Law 104-4, establishes requirements for Federal agencies to assess the effects of their regulatory actions on State, local, and tribal governments and the private sector. Under section 202 of the UMRA, we generally must prepare a written statement, including cost-benefit analysis, for proposed and final rules with "Federal mandates" that may result in expenditures to State, local, and tribal governments, in the aggregate, or to the private sector, of \$100 million or more in any 1 year. Before promulgating an EPA rule for which a written statement is needed, section 205 of the UMRA generally requires us to identify and consider a reasonable number of regulatory alternatives and adopt the least costly, most cost-effective, or least burdensome alternative that achieves the objectives of the final rule. The provisions of section 205 do not apply when they are inconsistent with applicable law. Moreover, section 205 allows us to adopt an alternative with other than the least costly, most cost-effective, or least burdensome alternative if we publish with the final rule an explanation why that alternative was not adopted.

Before we establish any regulatory requirements that may significantly or uniquely affect small governments, including tribal governments, we must have developed under section 203 of the UMRA a small government agency plan. The plan must provide for notifying potentially affected small governments, enabling officials of affected small governments to have meaningful and timely input in the development of our regulatory proposals with significant Federal intergovernmental mandates, and informing, educating, and advising small governments on compliance with the regulatory requirements.

We have determined that the final rule does not contain a Federal mandate that may result in expenditures of \$100 million or more for State, local, or tribal governments, in the aggregate, or the private sector in any 1 year. The maximum total annual cost of the final rule for any year has been estimated to be approximately \$6.2 million. Thus, today's final rule is not subject to the requirements of sections 202 and 205 of the UMRA. In addition, we have determined that the final rule contains no regulatory requirements that might significantly or uniquely affect small governments because it contains no regulatory requirements that apply to such governments or impose obligations upon them. Therefore, the final rule is not subject to the requirements of section 203 of the UMRA.

E. Executive Order 13132, Federalism

Executive Order 13132 (64 FR 43255; August 10, 1999) requires EPA to develop an accountable process to ensure "meaningful and timely input by State and local officials in the development of regulatory policies that have federalism implications." "Policies that have federalism implications" are defined in the Executive Order to include regulations that have "substantial direct effects on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of Government."

The final rule does not have federalism implications. It will not have substantial direct effects on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of Government, as specified in Executive Order 13132. The standards apply only to HCl producers and do not pre-exempt States from adopting more stringent standards or otherwise regulate State or local governments. Thus, Executive Order 13132 does not apply to the final rule.

F. Executive Order 13175, Consultation and Coordination with Indian Tribal Governments

Executive Order 13175 (65 FR 67249; November 6, 2000) requires EPA to develop an accountable process to ensure "meaningful and timely input by tribal officials in the development of regulatory policies that have tribal implications." "Policies that have tribal implications" is defined in the Executive Order to include regulations that have "substantial direct effects on one or more Indian tribes, on the relationship between the Federal government and the Indian tribes, or on the distribution of power and responsibilities between the Federal government and Indian tribes."

The final rule does not have tribal implications. It will not have substantial direct effects on tribal governments, on the relationship between the Federal government and Indian tribes, or on the distribution of power and responsibilities between the Federal government and Indian tribes, as specified in Executive Order 13175. Thus, Executive Order 13175 does not apply to the final rule.

G. Executive Order 13045, Protection of Children from Environmental Health and Safety Risks

Executive Order 13045 (62 FR 19885; April 23, 1997) applies to any rule that (1) is determined to be "economically significant" as defined under Executive Order 12866, and (2) concerns an environmental health or

safety risk that EPA has reason to believe may have a disproportionate effect on children. If the regulatory action meets both criteria, the Agency must evaluate the environmental health or safety effects of the planned rule on children and explain why the planned rule is preferable to other potentially effective and reasonably feasible alternatives that we considered.

The final rule is not subject to Executive Order 13045 because it is not an economically significant regulatory action as defined by Executive Order 12866. In addition, EPA interprets Executive Order 13045 as applying only to those regulatory actions that are based on health and safety risks, such that the analysis required under section 5-501 of the Order has the potential to influence the regulation. The final rule is not subject to Executive Order 13045 because it is based on technology performance and not on health or safety risks.

H. Executive Order 13211, Actions That Significantly Affect Energy Supply, Distribution, or Use

The final rule is not subject to Executive Order 13211 (66 FR 28355; May 22, 2001) because it is not a significant regulatory action under Executive Order 12866.

I. National Technology Transfer and Advancement Act

Section 12(d) of the National Technology Transfer and Advancement Act (NTTAA) of 1995, Public Law 104-113,



section 12(d) (15 U.S.C. 272 note) directs us to use voluntary consensus standards (VCS) in our regulatory activities unless to do so would be inconsistent with applicable law or otherwise impractical. Voluntary consensus standards are technical standards (e.g., materials specifications, test methods, sampling procedures, business practices) developed or adopted by one or more voluntary consensus bodies. The NTTAA directs us to provide Congress, through annual reports to OMB, with explanations when we do not use available and applicable VCS.

The final rule involves technical standards. We are citing the following methods in the final rule: EPA Methods 1, 1A, 2, 2A, 2C, 2D, 2F, 2G, 4, and 26A of 40 CFR part 60, appendix A. Consistent with the NTTAA, the EPA conducted searches to identify voluntary consensus standards in addition to these EPA methods. No applicable voluntary consensus standards were identified for EPA Methods 1A, 2A, 2D, 2F, and 2G. The search and review results have been documented and are placed in Docket ID No. OAR-2002-0057 for the final rule.

This search for emission measurement procedures identified eight voluntary consensus standards potentially applicable to the final rule. The EPA determined that six of these eight standards were impractical alternatives to EPA test methods for the purposes of the final rule.

Therefore, the final rule does not adopt these standards today. The reasons for this determination for the six methods are discussed below.

The standard ISO 10780:1994, "Stationary Source Emissions - Measurement of Velocity and Volume Flowrate of Gas Streams in Ducts," is impractical as an alternative to EPA Method 2 in the final rule. This standard, ISO 10780:1994, recommends the use of L-shaped pitots, which historically have not been recommended by EPA because the S-type design has large openings which are less likely to plug up with dust.

The standard ASTM D3464-96 (2001), "Standard Test Method Average Velocity in a Duct Using a Thermal Anemometer," is impractical as an alternative to EPA Method 2 for the purposes of the final rule primarily because applicability specifications are not clearly defined (e.g., range of gas composition, temperature limits). Also, the lack of supporting quality assurance data for the calibration procedures and specifications, and certain variability issues that are not adequately addressed by the standard limit EPA's ability to make a definitive comparison of the method in these areas.

The European standard EN 1911-1,2,3 (1998), "Stationary Source Emissions-Manual Method of Determination of HCl-Part 1: Sampling of Gases Ratified European Text-Part 2:

Gaseous Compounds Absorption Ratified European Text-Part 3: Adsorption Solutions Analysis and Calculation Ratified European Text," is impractical as an alternative to EPA Method 26A. Part 3 of this standard cannot be considered equivalent to EPA Method 26 or 26A because the sample absorbing solution (water) would be expected to capture both HCl and Cl<sub>2</sub> gas, if present, without the ability to distinguish between the two. The EPA Methods 26 and 26A use an acidified absorbing solution to first separate HCl and Cl<sub>2</sub> gas so that they can be selectively absorbed, analyzed, and reported separately. In addition, in EN 1911 the absorption efficiency for Cl<sub>2</sub> gas would be expected to vary as the pH of the water changed during sampling.

Three of the six voluntary consensus standards are impractical alternatives to EPA test methods for the purposes of the final rule because they are too general, too broad, or not sufficiently detailed to assure compliance with EPA regulatory requirements: ASTM D3154-00, "Standard Method for Average Velocity in a Duct (Pitot Tube Method)," for EPA Methods 1, 2, 2C, and 4; ASTM 3796-90 (1998), "Standard Practice for Calibration of Type S Pitot Tubes," for EPA Method 2; and ASTM E337-84 (1996), "Standard Test Method for Measuring Humidity with a Psychrometer (the Measurement of Wet- and Dry-Bulb Temperatures)," for EPA Method 4.

The following two of the eight voluntary consensus standards identified in this search were not available at the time the review was conducted for the purposes of the final rule because they are under development by a voluntary consensus body: ASME/BSR MFC 12M, "Flow in Closed Conduits Using Multiport Averaging Pitot Primary Flowmeters," for EPA Method 2; and ASME/BSR MFC 13M, "Flow Measurement by Velocity Traverse," for EPA Method 1 (and possibly 2).

Section 63.9020 to subpart NNNNN lists the EPA testing methods included in the final rule. Under 40 CFR 63.8 of subpart A, a source may apply to EPA for permission to use alternative monitoring in place of any of the EPA testing methods.

#### J. Congressional Review Act

The Congressional Review Act, 5 U.S.C. §801 et seq., as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the final rule must submit a rule report, which includes a copy of the final rule, to each House of the Congress and to the Comptroller General of the United States. The EPA will submit a report containing the final rule and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of the final rule in the Federal Register. The

final rule is not a "major rule" as defined by 5 U.S.C.  
804(2). The final rule will be effective on [**INSERT DATE OF  
PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER**].

**List of Subjects in 40 CFR Part 63**

Environmental protection, Administrative practice and procedure, Air pollution control, Hazardous substances, Intergovernmental relations, Recordkeeping and reporting requirements.

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Dated:

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Christine Todd Whitman,  
Administrator.

For the reasons stated in the preamble, title 40, chapter I, part 63, of the Code of the Federal Regulations is amended as follows:

**PART 63--[AMENDED]**

1. The authority citation for part 63 continues to read as follows:

**Authority:** 42 U.S.C. 7401, et seq.

2. Part 63 is amended by adding subpart NNNNN to read as follows:

**Subpart NNNNN--National Emission Standards for Hazardous Air**

**Pollutants: Hydrochloric Acid Production**

**What This Subpart Covers**

\$63.8980 What is the purpose of this subpart?  
 \$63.8985 Am I subject to this subpart?  
 \$63.8990 What parts of my plant does this subpart cover?  
 \$63.8995 When do I have to comply with this subpart?

**Emission Limitations and Work Practice Standards**

\$63.9000 What emission limitations and work practice standards must I meet?

**General Compliance Requirements**

\$63.9005 What are my general requirements for complying with this subpart?

**Testing and Initial Compliance Requirements**

\$63.9010 By what date must I conduct performance tests?  
 \$63.9015 When must I conduct subsequent performance tests?  
 \$63.9020 What performance tests and other procedures must I use?  
 \$63.9025 What are my monitoring installation, operation, and maintenance requirements?

\$63.9030 How do I demonstrate initial compliance with the emission limitations and work practice standards?

### **Continuous Compliance Requirements**

\$63.9035 How do I monitor and collect data to demonstrate continuous compliance?

\$63.9040 How do I demonstrate continuous compliance with the emission limitations and work practice standards?

### **Notifications, Reports, and Records**

\$63.9045 What notifications must I submit and when?

\$63.9050 What reports must I submit and when?

\$63.9055 What records must I keep?

\$63.9060 In what form and how long must I keep my records?

### **Other Requirements and Information**

\$63.9065 What parts of the General Provisions apply to me?

\$63.9070 Who implements and enforces this subpart?

\$63.9075 What definitions apply to this subpart?

### **Tables to Subpart NNNNN of Part 63**

Table 1 to Subpart NNNNN of Part 63-Emission Limits and Work Practice Standards

Table 2 to Subpart NNNNN of Part 63-Operating Limits

Table 3 to Subpart NNNNN of Part 63-Performance Test Requirements for HCl Production Affected Sources

Table 4 to Subpart NNNNN of Part 63-Initial Compliance with Emission Limitations and Work Practice Standards

Table 5 to Subpart NNNNN of Part 63-Continuous Compliance with Emission Limitations and Work Practice Standards

Table 6 to Subpart NNNNN of Part 63-Requirements for Reports

Table 7 to Subpart NNNNN of Part 63-Applicability of General Provisions to Subpart NNNNN

### **What This Subpart Covers**

\$63.8980 What is the purpose of this subpart?

This subpart establishes national emission standards for hazardous air pollutants (NESHAP) and work practice standards for hazardous air pollutants (HAP) emitted from



hydrochloric acid (HCl) production. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations and work practice standards.

§63.8985 Am I subject to this subpart?

(a) You are subject to this subpart if you own or operate an HCl production facility that produces a liquid HCl product at a concentration of 30 weight percent or greater during its normal operations and is located at, or is part of, a major source of HAP. This does not include HCl production facilities that only produce occasionally liquid HCl product at a concentration of 30 weight percent or greater.

(1) An HCl production facility is the collection of unit operations and equipment associated with the production of liquid HCl product. The HCl production facility begins at the point where a gaseous stream containing HCl enters the HCl production unit. The HCl production facility includes all HCl storage tanks that contain liquid HCl product that is produced in the HCl production unit, with the exceptions noted in paragraph (a)(2) of this section. The HCl production facility also includes all HCl transfer operations that load HCl product produced in the HCl production unit into a tank truck, rail car, ship, or barge, along with the piping and other equipment in HCl service

used to transfer liquid HCl product from the HCl production unit to the HCl storage tanks and/or HCl transfer operations. The HCl production facility ends at the point that the liquid HCl product produced in the HCl production unit is loaded into a tank truck, rail car, ship, or barge, at the point the HCl product enters another process on the plant site, or at the point the HCl product leaves the plant site via pipeline.

(2) Storage tanks that are dedicated feedstock tanks for another process and storage tanks that store HCl dedicated for use in wastewater treatment are not considered part of an HCl production facility.

(3) A major source of HAP emissions is any stationary source or group of stationary sources within a contiguous area under common control that emits or has the potential to emit any single HAP at a rate of 9.07 megagrams (10 tons) or more per year or any combination of HAP at a rate of 22.68 megagrams (25 tons) or more per year.

(b) An HCl production facility is not subject to this subpart if it is also subject to NESHAP under one of the subparts listed in paragraphs (b)(1) through (5) of this section.

(1) 40 CFR part 63, subpart S, National Emission Standards for Hazardous Air Pollutants from the Pulp and Paper Industry.

(2) 40 CFR part 63, subpart CCC, National Emission Standards for Hazardous Air Pollutants for Steel Pickling--HCl Process Facilities and Hydrochloric Acid Regeneration Plants.

(3) 40 CFR part 63, subpart MMM, National Emission Standards for Hazardous Air Pollutants for Pesticide Active Ingredient Production.

(4) 40 CFR part 63, subpart EEE, National Emission Standards for Hazardous Air Pollutants for Hazardous Waste Combustors.

(5) 40 CFR part 63, subpart GGG, National Emission Standards for Pharmaceuticals Production.

(c) An HCl production facility is not subject to this subpart if it is located following the incineration of chlorinated waste gas streams, waste liquids, or solid wastes, and the emissions from the HCl production facility are subject to one of the requirements listed in paragraphs (c)(1) through (3) of this section.

(1) Section 63.113(c), subpart G, National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater.

(2) Section 264.343(b), Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities (subpart O, Incinerators).

(3) Section 266.107, subpart H, Burning of Hazardous Waste in Boilers and Industrial Furnaces.

(d) An HCl production facility is not subject to this subpart if it produces HCl through the direct synthesis of hydrogen and chlorine and is part of a chlor-alkali facility.

(e) An HCl production facility is not subject to this subpart if it is a research and development facility.

(f) An HCl production facility is not subject to this subpart if all of the gaseous streams containing HCl and chlorine ( $\text{Cl}_2$ ) from HCl process vents, HCl storage tanks, and HCl transfer operations are recycled or routed to another process prior to being discharged to the atmosphere.

\$63.8990 What parts of my plant does this subpart cover?

(a) This subpart applies to each new, reconstructed, or existing affected source at an HCl production facility.

(b) The affected source is the group of one or more HCl production facilities at a plant site that are subject to this subpart, and all associated wastewater operations, which contain the collection of emission streams listed in paragraphs (b)(1) through (5) of this section.

(1) Each emission stream from an HCl process vent.

(2) Each emission stream from an HCl storage tank.

(3) Each emission stream from an HCl transfer operation.

(4) Each emission stream resulting from leaks from equipment in HCl/Cl<sub>2</sub> service.

(5) Each emission stream from HCl wastewater operations. There are no emission limitations or other requirements in this subpart that apply to HCl wastewater operations.

(c) An affected source is a new affected source if you commenced construction of the affected source after September 18, 2001 and you met the applicability criteria of §63.8985 at the time you commenced construction.

(d) An affected source is reconstructed if you meet the criteria as defined in §63.2.

(e) An affected source is existing if it is not new or reconstructed.

§63.8995 When do I have to comply with this subpart?

(a) If you have a new or reconstructed affected source, you must comply with this subpart according to paragraphs (a)(1) or (2) of this section.

(1) If you start up your affected source before [DATE THE FINAL RULE IS PUBLISHED IN THE FEDERAL REGISTER], you must comply with the emission limitations and work practice

standards in this subpart no later than [DATE THE FINAL RULE IS PUBLISHED IN THE FEDERAL REGISTER].

(2) If you start up your affected source after [DATE THE FINAL RULE IS PUBLISHED IN THE FEDERAL REGISTER], you must comply with the emission limitations and work practice standards in this subpart upon startup of your affected source.

(b) If you have an existing affected source, you must comply with the emission limitations and work practice standards no later than 3 years after [DATE THE FINAL RULE IS PUBLISHED IN THE FEDERAL REGISTER].

(c) If you have an area source that increases its emissions or its potential to emit such that it becomes a major source of HAP, the provisions in paragraphs (c)(1) and (2) of this section apply.

(1) Any portion of the existing facility that is a new affected source or a new reconstructed source must be in compliance with this subpart upon startup.

(2) All other parts of the source must be in compliance with this subpart no later than the date 3 years after the area source becomes a major source.

(d) You must meet the notification requirements in §63.9045 according to the schedule in §63.9045 and in subpart A of this part. Some of the notifications must be

submitted before you are required to comply with the emission limitations in this subpart.

**Emission Limitations and Work Practice Standards**

§63.9000 What emission limitations and work practice standards must I meet?

(a) With the exceptions noted in paragraph (c) of this section, you must meet the applicable emission limit and work practice standard in Table 1 to this subpart for each emission stream listed under §63.8990(b)(1) through (4) that is part of your affected source.

(b) With the exceptions noted in paragraph (c) of this section, you must meet the applicable operating limit in Table 2 to this subpart for each emission stream listed under §63.8990(b)(1) through (3) that is part of your affected source.

(c) The emission streams listed in paragraphs (c)(1) through (3) of this section are exempt from the emission limitations, work practice standards, and all other requirements of this subpart.

(1) Emission streams from HCl storage tanks that never store liquid HCl product with a concentration of 30 weight percent or greater.

(2) Emission streams from HCl transfer operations that never load liquid HCl product with a concentration of 30 weight percent or greater.

(3) Emission streams from HCl wastewater operations.

### **General Compliance Requirements**

§63.9005 What are my general requirements for complying with this subpart?

(a) You must be in compliance with the emission limitations and work practice standards in this subpart at all times, except during periods of startup, shutdown, and malfunction.

(b) You must always operate and maintain your affected source, including air pollution control and monitoring equipment, according to the provisions in §63.6(e)(1)(i).

(c) You must develop and implement a written startup, shutdown, and malfunction plan according to the provisions in §63.6(e)(3).

(d) All monitoring equipment shall be installed, calibrated, maintained, and operated according to manufacturer's specifications or other written procedures that provide adequate assurance that the equipment would reasonably be expected to monitor accurately. For each monitoring system required in this section, you must develop, implement, and submit to the Administrator a site-



specific monitoring plan that addresses the installation requirements in paragraphs (d)(1) through (3) of this section, the ongoing procedures in paragraphs (d)(4) through (6) of this section, and the requirements in §63.9025, as applicable. You must submit the plan with your Notification of Compliance Status. Upon request of the Administrator, you must promptly correct any deficiencies in a site-specific monitoring plan and submit the revised plan.

(1) Installation of the continuous monitoring system (CMS) sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (e.g., on or downstream of the last control device).

(2) Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction system.

(3) Performance evaluation procedures and acceptance criteria (e.g., calibrations).

(4) Ongoing operation and maintenance (O&M) procedures in accordance with the general requirements of §§63.8(c)(1), (3), (4)(ii), (7), and (8), and 63.9025.

(5) Ongoing data quality assurance procedures in accordance with the general requirements of §63.8(d).

(6) Ongoing recordkeeping and reporting procedures in accordance with the general requirements of §63.10(c) and (e)(1) and (2)(i).

### **Testing and Initial Compliance Requirements**

§63.9010 By what date must I conduct performance tests?

(a) If you have a new or reconstructed affected source, you must conduct performance tests within 180 calendar days after the compliance date that is specified for your source in §63.8995(a) and according to the provisions in §63.7(a)(2).

(b) If you have an existing affected source, you must conduct performance tests within 180 calendar days after the compliance date that is specified for your existing affected source in §63.8995(b) and according to the provisions in §63.7(a)(2).

(c) If you commenced construction or reconstruction between September 18, 2001 and [DATE THE FINAL RULE IS PUBLISHED IN THE FEDERAL REGISTER], you must demonstrate initial compliance with either the proposed emission limitation or the promulgated emission limitation no later than 180 calendar days after [DATE THE FINAL RULE IS PUBLISHED IN THE FEDERAL REGISTER] or within 180 calendar days after startup of the source, whichever is later, according to §63.7(a)(2)(ix).

§63.9015 When must I conduct subsequent performance tests?

(a) You must conduct all applicable performance tests according to the procedures in §63.9020 on the earlier of your title V operating permit renewal or within 5 years of issuance of your title V permit.

(b) You must report the results of subsequent performance tests within 60 days after the completion of the test. This report should also verify that the operating limits for your affected source have not changed or provide documentation of revised operating limits established as specified in Table 2 to this subpart. The reports for all subsequent performance tests should include all applicable information required in §63.9050.

§63.9020 What performance tests and other procedures must I use?

(a) You must conduct each performance test in Table 3 to this subpart that applies to you as directed in paragraphs (a)(1) through (4) of this section, except as noted in paragraphs (b) and (c) of this section.

(1) You must develop a site-specific test plan according to §63.7(c)(2) and conduct each performance test according to the site-specific test plan.

(2) You must conduct each performance test under representative conditions according to the requirements in

§63.7(e)(1) and under the specific conditions that this subpart specifies in Table 3.

(3) You may not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in §63.7(e)(1).

(4) You must conduct at least three separate test runs for each performance test required in this section, as specified in §63.7(e)(3). Each test run must last at least 1 hour.

(b) If you are complying with a percent reduction emission limitation, you must determine the percent reduction in accordance with paragraphs (b)(1) and (2) of this section.

$$E_i = K_2 (C_i M_i) Q_i \quad \text{Equation 1}$$

$$E_o = K_2 (C_o M_o) Q_o \quad \text{Equation 2}$$

(1) Calculate the mass rate of either HCl or chlorine using Equations 1 and 2 of this section:

where:

$C_i, C_o$	=	Concentration of HCl or $Cl_2$ in the gas stream at the inlet and outlet of the control device(s), respectively, dry basis, parts per million by volume.
$E_i, E_o$	=	Mass rate of HCl or $Cl_2$ at the inlet and outlet of the control device(s), respectively, dry basis, kilogram per hour.

$M_i, M_o$	=	Molecular weight of HCl or Cl <sub>2</sub> at the inlet and outlet of the control device(s), respectively, gram/gram-mole.
$Q_i, Q_o$	=	Flow rate of gas stream at the inlet and outlet of the control device(s), respectively, dry standard cubic meter per minute.
$K_2$	=	Constant, $2.494 \times 10^{-6}$ (parts per million) <sup>-1</sup> (gram-mole per standard cubic meter) (kilogram/gram) (minute/hour), where standard temperature (gram-mole per standard cubic meter) is 20 °C.

(2) Calculate the percent reduction of HCl or Cl<sub>2</sub> using Equation 3 of this section:

$$R = \frac{E_i - E_o}{E_i} (100) \quad \text{Equation 3}$$

where:

- R = Control efficiency of control device(s).
- $E_i$  = Mass rate of HCl or Cl<sub>2</sub> to the inlet to the control device(s), kilograms per hour.
- $E_o$  = Mass rate of HCl or Cl<sub>2</sub> at the outlet of the control device(s), kilograms per hour.

(c) You may prepare a design evaluation in lieu of conducting a performance test for HCl storage tanks and HCl transfer operations that are not routed to a control device that also controls HCl process vent emissions or any other continuous vent stream. The design evaluation shall include documentation demonstrating that the control technique being used achieves the required control efficiency when a liquid HCl product with a concentration of 30 weight percent or

greater is being loaded into the storage tank, or a tank truck, rail car, ship, or barge.

(1) If you use a caustic scrubber control device or a water scrubber control device, the design evaluation shall address the vent stream composition, constituent concentrations, liquid-to-vapor ratio, scrubbing liquid flow rate and concentration, temperature, and the reaction kinetics of the constituents with the scrubbing liquid. The design evaluation shall establish the design exhaust vent concentration level and shall include the additional information in paragraphs (c)(1)(i) and (ii) of this section for trays and a packed column scrubber.

(i) Type and total number of theoretical and actual trays.

(ii) Type and total surface area of packing for entire column and for individual packed sections, if the column contains more than one packed section.

(2) If you use any other control device, the design evaluation shall address the composition and HAP concentration of the vent stream immediately preceding the control device, as well as other parameters necessary to demonstrate that the control technique being used achieves the required control efficiency when a liquid HCl product with a concentration of 30 weight percent or greater is

being loaded into the storage tank, or a tank truck, rail car, ship, or barge.

(d) You are not required to conduct a performance test for an emission point for which a performance test was conducted within the previous 5-year period, using the same test methods specified in this section and for which either no deliberate process changes have been made since the test, or the owner or operator can demonstrate that the results of the performance test, with or without adjustments, reliably demonstrate compliance despite process changes. The operating limits reported under the previous performance test shall be sufficient to meet the monitoring requirements in this subpart.

(e) You must establish all operating limits with which you will demonstrate continuous compliance with the applicable emission limits in Table 1 to this subpart as described in paragraphs (e)(1) through (3) of this section.

(1) If you use a caustic scrubber control device or water scrubber control device and you conduct a performance test, you must establish operating limits according to paragraphs (e)(1)(i) and (ii) of this section. If a series of control devices are used, you must establish separate operating limits for each device.

(i) You must establish the minimum value as the operating limit for scrubber inlet liquid or recirculating

liquid flow rate, as appropriate. The minimum value shall be based on the scrubber inlet liquid or recirculating liquid flow rate, as appropriate, values measured during the performance test.

(ii) You must establish the minimum and maximum values as the operating limits for scrubber effluent pH. The minimum and maximum values shall be based on the scrubber effluent pH values measured during the performance test.

(2) If you use any other control device and you conduct a performance test, you must establish operating limits according to your site-specific test plan submitted in accordance with §63.7(c)(2)(i). The operating limits shall be based on the operating parameter values measured during the performance test. If a series of control devices are used, you must establish separate operating limits for each device.

(3) If you do not conduct a performance test for a HCl storage tank or HCl transfer operation, you must use engineering assessments and/or manufacturer's recommendations to establish the operating limits specified in paragraphs (e)(1)(i) and (ii), or (e)(2), of this section.

(4) As needed in applicability determinations, you must use ASTM E224 to determine the HCl concentration in liquid products.



\$63.9025 What are my monitoring installation, operation, and maintenance requirements?

(a) For each operating parameter that you are required by \$63.9020(d) to monitor, you must install, operate, and maintain each CMS according to the requirements in paragraphs (a)(1) through (6) of this section.

(1) You must operate your CMS and collect data at all times the process is operating.

(2) You must collect data from at least four equally spaced periods each hour.

(3) For at least 75 percent of the operating hours in a 24-hour period, you must have valid data (as defined in your site-specific monitoring plan) for at least 4 equally spaced periods each hour.

(4) For each hour that you have valid data from at least four equally spaced periods, you must calculate the hourly average value using all valid data or, where data are collected from an automated CMS, using at least one measured value per minute if measured more frequently than once per minute.

(5) You must calculate the daily average using all of the hourly averages calculated according to paragraph (a)(4) of this section for the 24-hour period.

(6) You must record the results for each inspection, calibration, and validation check as specified in your site-specific monitoring plan.

(b) For scrubber control devices, you may request approval, in accordance with §63.8(f), to monitor parameters other than those specified in §63.9020(e). In accordance with §63.8(f), you must submit a monitoring plan to the Administrator and the plan must meet the requirements in paragraphs (a) and (b)(1) through (3) of this section. You must conduct monitoring in accordance with the plan submitted to the Administrator unless comments received from the Administrator require an alternate monitoring scheme.

(1) Identify the operating parameter to be monitored to ensure that the control or capture efficiency measured during the initial compliance test is maintained.

(2) Discuss why this parameter is appropriate for demonstrating ongoing compliance.

(3) Identify the specific monitoring procedures.

(c) For any other control device, you must ensure that the CMS is operated according to a monitoring plan submitted to the Administrator as required by §63.8(f). The monitoring plan must meet the requirements in paragraphs (a) and (c)(1) through (3) of this section. You must conduct monitoring in accordance with the plan submitted to the

Administrator, as amended, unless comments received from the Administrator require an alternate monitoring scheme.

(1) Identify the operating parameter to be monitored to ensure that the control or capture efficiency measured during the initial compliance test is maintained.

(2) Discuss why this parameter is appropriate for demonstrating ongoing compliance.

(3) Identify the specific monitoring procedures.

§63.9030 How do I demonstrate initial compliance with the emission limitations and work practice standards?

(a) You must demonstrate initial compliance with each emission limit and work practice standard that applies to you according to Table 4 to this subpart.

(b) You must establish each site-specific operating limit in Table 2 to this subpart that applies to you according to the requirements in §63.9020 and Table 3 to this subpart.

(c) You must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in §63.9045(e).

#### **Continuous Compliance Requirements**

§63.9035 How do I monitor and collect data to demonstrate continuous compliance?

(a) You must monitor and collect data according to this section.

(b) If you use a caustic scrubber or a water scrubber/absorber to meet the emission limits in Table 1 to this subpart, you must keep the records specified in paragraphs (b)(1) and (2) of this section to support your compliance demonstration.

(1) Records of daily average scrubber inlet liquid or recirculating liquid flow rate, as appropriate.

(2) Records of the daily average scrubber effluent pH.

(c) If you use any other control device to meet the emission limits in Table 1 to this subpart, you must keep records of the operating parameter values identified in your monitoring plan in §63.9025(c) to support your compliance demonstration.

(d) Except for monitor malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), you must monitor continuously (or collect data at all required intervals) at all times that the affected source is operating. This includes periods of startup, shutdown, or malfunction when the affected source is operating. A monitoring malfunction includes, but is not limited to, any sudden, infrequent, not reasonably preventable failure of the monitoring equipment

to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

(e) You may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels, nor may such data be used in fulfilling a minimum data availability requirement, if applicable. You must use all the data collected during all other periods in assessing the operation of the control device and associated control system.

\$63.9040 How do I demonstrate continuous compliance with the emission limitations and work practice standards?

(a) You must demonstrate continuous compliance with each emission limit and work practice standard in Table 1 to this subpart that applies to you according to Table 4 to this subpart.

(b) You must demonstrate continuous compliance with each operating limit in Table 2 of this subpart that applies to you according to Tables 4 and 5 to this subpart.

(c) You must report each instance in which you did not meet an emission limit, work practice standard or operating limit in Table 1 or 2 to this subpart, respectively, that applies to you. This includes periods of startup, shutdown,

and malfunction. These instances are deviations from the emission limitations in this subpart. These deviations must be reported according to the requirements in §63.9050.

(d) During periods of startup, shutdown, or malfunction, you must operate in accordance with the startup, shutdown, and malfunction plan.

(e) Consistent with §§63.6(e) and 63.7(e)(1), deviations that occur during a period of startup, shutdown, or malfunction are not violations if you demonstrate to the Administrator's satisfaction that you were operating in accordance with the startup, shutdown, and malfunction plan. The Administrator will determine whether deviations that occur during a period of startup, shutdown, or malfunction are violations, according to the provisions in §63.6(e).

### **Notifications, Reports, and Records**

#### §63.9045 What notifications must I submit and when?

(a) You must submit all of the notifications in §§63.7(b) and (c), 63.8(f)(4) and (6), and 63.9 (b) through (h) that apply to you by the dates specified.

(b) As specified in §63.9(b)(2), if you start up your affected source before [DATE THE FINAL RULE IS PUBLISHED IN THE FEDERAL REGISTER], you must submit an Initial Notification not later than 120 calendar days after [DATE THE FINAL RULE IS PUBLISHED IN THE FEDERAL REGISTER].

(c) As specified in §63.9(b)(4), if you start up your new or reconstructed affected source on or after [DATE THE FINAL RULE IS PUBLISHED IN THE FEDERAL REGISTER], you must submit the application for construction or reconstruction required by §63.9(b)(1)(iii) in lieu of the initial notification.

(d) You must submit a notification of intent to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin, as required in §63.7(b)(1).

(e) When you conduct a performance test as specified in Table 3 to this subpart, you must submit a Notification of Compliance Status according to §63.9(h)(2)(ii).

(f) You must submit the Notification of Compliance Status, including the performance test results, before the close of business on the 60th calendar day following the completion of the performance test according to §63.10(d)(2).

(g) The Notification of Compliance Status must also include the information in paragraphs (g)(1) through (2) of this section that applies to you.

(1) Each operating parameter value averaged over the full period of the performance test (for example, average pH).

(2) Each operating parameter range within which HAP emissions are reduced to the level corresponding to meeting the applicable emission limits in Table 1 to this subpart.

§63.9050 What reports must I submit and when?

(a) You must submit each report in Table 6 to this subpart that applies to you.

(b) Unless the Administrator has approved a different schedule for submission of reports under §63.10(a), you must submit each report according to paragraphs (b)(1) through (5) of this section.

(1) The first compliance report must cover the period beginning on the compliance date that is specified for your affected source in §63.8995 and ending on June 30 or December 31, whichever date is the first date following the end of the first calendar half after the compliance date that is specified for your source in §63.8995.

(2) The first compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date follows the end of the first calendar half after the compliance date that is specified for your affected source in §63.8995.

(3) Each subsequent compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.



(4) Each subsequent compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

(5) For each affected source that is subject to permitting regulations pursuant to 40 CFR part 70 or 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6

(a) (3) (iii) (A) or 71.6 (a) (3) (iii) (A), you may submit the first and subsequent compliance reports according to the dates the permitting authority has established instead of according to the dates in paragraphs (b) (1) through (4) of this section.

(c) The compliance report must contain the following information in paragraphs (c) (1) through (7) of this section.

(1) Company name and address.

(2) Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.

(3) Date of report and beginning and ending dates of the reporting period.

(4) If you had a startup, shutdown, or malfunction during the reporting period and you took actions consistent with your startup, shutdown, and malfunction plan, the

compliance report must include the information in §63.10(d)(5)(i).

(5) If there are no deviations from any emission limitations that apply to you, a statement that there were no deviations from the emission limitations during the reporting period.

(6) If there were no periods during which the CMS was out-of-control in accordance with the monitoring plan, a statement that there were no periods during the which the CMS was out-of-control during the reporting period.

(7) Verification that you continue to use the equipment LDAR plan and information that explains any periods when the procedures in the plan were not followed and the corrective actions were not taken.

(d) For each deviation from an emission limitation occurring at an affected source where you are using a CMS to comply with the emission limitation in this subpart, you must include the information in paragraphs (c)(1) through (6) of this section and the following information in paragraphs (d)(1) through (9) of this section. This includes periods of startup, shutdown, and malfunction.

(1) The date and time that each malfunction started and stopped.

(2) The date and time that each CMS was inoperative, except for zero (low-level) and high-level checks.

(3) The date, time, and duration that each CMS was out-of-control, including the information in §63.8(c)(8).

(4) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period.

(5) A summary of the total duration of the deviation during the reporting period and the total duration as a percent of the total source operating time during that reporting period.

(6) A breakdown of the total duration of the deviations during the reporting period into those that are due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes.

(7) A summary of the total duration of CMS downtime during the reporting period, and the total duration of CMS downtime as a percent of the total source operating time during that reporting period.

(8) A brief description of the process units.

(9) A description of any changes in CMS, processes, or controls since the last reporting period.

(e) Each affected source that has obtained a title V operating permit pursuant to 40 CFR part 70 or 71 must report all deviations as defined in this subpart in the

semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 71.6(a)(3)(iii)(A). If an affected source submits a compliance report pursuant to Table 6 to this subpart along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 71.6(a)(3)(iii)(A), and the compliance report includes all required information concerning deviations from any emission limitation in this subpart, submission of the compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a compliance report shall not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permit authority.

(f) For each startup, shutdown, or malfunction during the reporting period that is not consistent with your startup, shutdown, and malfunction plan you must submit an immediate startup, shutdown and malfunction report. Unless the Administrator has approved a different schedule for submission of reports under §63.10(a), you must submit each report according to paragraphs (f)(1) and (2) of this section.

(1) An initial report containing a description of the actions taken for the event must be submitted by fax or

telephone within 2 working days after starting actions inconsistent with the plan.

(2) A follow-up report containing the information listed in §63.10(d)(5)(ii) must be submitted within 7 working days after the end of the event unless you have made alternative reporting arrangements with the permitting authority.

§63.9055 What records must I keep?

(a) You must keep a copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, as required in §63.10(b)(2)(xiv).

(b) You must also keep the following records specified in paragraphs (b)(1) through (5) of this section.

(1) The records in §63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction.

(2) Records of performance tests as required in §63.10(b)(2)(viii).

(3) Records of operating parameter values that are consistent with your monitoring plan.

(4) Records of the date and time that each deviation started and stopped and whether the deviation occurred during a period of startup, shutdown, or malfunction or during another period.

(5) Copies of the current versions of the site-specific monitoring plan and the equipment LDAR plan. You also must submit copies of these plans and any revisions or updates to the Administrator **for comment only (not for approval)**.

§63.9060 In what form and how long must I keep my records?

(a) Your records must be in a form suitable and readily available for expeditious inspection and review, according to §63.10(b)(1).

(b) As specified in §63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

(c) You must keep each record on site, or readily accessible from on site through a computer or other means, for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §63.10(b)(1). You can keep the records off site for the remaining 3 years. Records may be maintained in hard copy or computer-readable format including, but not limited to, on paper, microfilm, hard disk drive, floppy disk, compact disk, magnetic tape, or microfiche.

(d) You must keep each previous (i.e., superseded) version of the site-specific monitoring plan and the LDAR

plan for a period of 5 years after revision of the plan.

If, at any time after adoption of a site-specific monitoring plan or an LDAR plan, your affected source ceases operation or is otherwise no longer subject to the provisions of this subpart, you must retain a copy of the most recent plan for 5 years from the date your source ceases operation or is no longer subject to this subpart.

#### **Other Requirements and Information**

##### §63.9065 What parts of the General Provisions apply to me?

(a) Table 7 to this subpart shows which parts of the General Provisions in §§63.1 through 63.15 apply to you.

##### §63.9070 Who implements and enforces this subpart?

(a) This subpart can be implemented and enforced by us, the U.S. EPA, or a delegated authority such as your State, local, or tribal agency. If the U.S. EPA Administrator has delegated authority to your State, local, or tribal agency, then that agency, as well as U.S. EPA, has the authority to implement and enforce this subpart. You should contact your U.S. EPA Regional Office to find out if this subpart is delegated to your State, local, or tribal agency.

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under section 40 CFR part 63, subpart E, the

authorities contained in paragraph (c) of this section are retained by the Administrator of U.S. EPA and are not transferred to the State, local, or tribal agency.

(c) The authorities in paragraphs (c)(1) through (4) of this section that cannot be delegated to State, local, or tribal agencies are as follows.

(1) Approval of alternatives to requirements in §§63.8980, 63.8985, 63.8990, 63.8995, and 63.9000.

(2) Approval of major changes to test methods under §63.7(e)(2)(ii) and (f) and as defined in §63.90.

(3) Approval of major changes to monitoring under §63.8(f) and as defined in §63.90.

(4) Approval of major changes to recordkeeping and reporting under §63.10(f) and as defined in §63.90.

§63.9075 What definitions apply to this subpart?

Terms used in this subpart are defined in the Clean Air Act in 40 CFR 63.2 and in this section as follows:

Caustic scrubber control device means any add-on device that mixes an aqueous stream or slurry containing a caustic substance with the exhaust gases from an HCl process vent, HCl storage tank, or HCl transfer operation to control emissions of HCl and/or Cl<sub>2</sub>.

Chlor-alkali facility means a facility where chlorine and sodium or potassium hydroxide are produced as co-products and hydrogen is produced as a by-product in an



electrolytic process using either mercury cells, diaphragm cells, or membrane cells.

Continuous monitoring system, for purposes of the final rule, means liquid flow monitoring devices that meet the performance specifications given in §63.9025(a); or pH monitoring devices that meet the performance specifications given in §63.9025(a); or other control devices as mentioned in 63.9025(a) and (b) or §63.9025(a) and (c).

Control device means an add-on device used to reduce HCl and/or Cl<sub>2</sub> emissions from an HCl process vent, HCl storage tank, or HCl transfer operation at an HCl production facility. An HCl production unit is not a control device.

Deviation means any instance in which an affected source subject to this subpart, or an owner or operator of such a source:

(1) fails to meet any requirement or obligation established by this subpart, including but not limited to any emission limitation or work practice standard;

(2) fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit; or

(3) fails to meet any emission limitation or work practice standard in this subpart during startup, shutdown,

or malfunction, regardless of whether or not such failure is permitted by this subpart.

Emission limitation means any emission limit or operating limit.

Emission stream means a gaseous stream from an HCl process vent, an HCl storage tank, an HCl transfer operation, leaking equipment in HCl service, or HCl wastewater operations that is discharged to the atmosphere. Gaseous streams from HCl process vents, HCl storage tanks, and HCl transfer operations that are routed to another process or recycled for reaction or other use (i.e., for pH control) of the HCl and/or Cl<sub>2</sub> are not emission streams. Gaseous streams from HCl transfer operations that are vapor balanced to an HCl storage tank subject to this subpart are not emission streams.

Equipment in HCl service means each pump, compressor, agitator, pressure relief device, sampling connection system, open-ended valve or line, valve, connector, and instrumentation system that contains 30 weight percent or greater of liquid HCl or 5 weight percent or greater of gaseous HCl at any time.

HCl process vent means the point of discharge to the atmosphere, or point of entry into a control device, of a gaseous stream that originates from an HCl production unit. The following points of discharge are not HCl process vents:

(1) A leak from equipment in HCl service subject to this subpart.

(2) An exit from a control device used to comply with this subpart.

(3) An HCl storage tank vent or HCl transfer operation vent subject to this subpart.

(4) A HCl wastewater operation vent subject to this subpart.

(5) A point of discharge from a relief valve.

(6) A point of discharge from an analyzer.

HCl production facility is defined in §63.8985(a)(i).

HCl production unit means an absorber or other vessel in which a liquid HCl product is manufactured by absorbing gaseous HCl into either water or an aqueous HCl solution.

HCl storage tank means a tank or other vessel that is used to store liquid HCl product. Tanks or vessels permanently attached to motor vehicles (such as trucks, railcars, barges, or ships) are not HCl storage tanks.

HCl transfer operation means the loading, into a tank truck, railcar, ship, or barge, of liquid HCl from a transfer (or loading) rack (as defined in this section) for which the predominant use is liquid HCl. The predominant use of a transfer (or loading) rack is the material that is loaded by the transfer (or loading) rack in the greatest amount.

HCl wastewater operation means an operation that handles and processes water containing HCl that is discarded from an HCl production facility.

Plant site means all contiguous or adjoining property that is under common control, including properties that are separated only by a road or other public right-of-way. Common control includes properties that are owned, leased, or operated by the same entity, parent entity, subsidiary, or any combination thereof.

Research and development facility means laboratory and pilot plant operations whose primary purpose is to conduct research and development into new processes and products, where the operations are under close supervision of technically trained personnel, and the operations are not engaged in the manufacture of products for commercial sale, except in a *de minimis* manner.

Responsible official means responsible official as defined in 40 CFR 70.2 of this chapter.

Transfer (or loading) rack means the collection of loading arms and loading hoses, at a single loading rack, that are used to fill tank trucks, railcars, ships, and/or barges. Transfer rack includes the associated pumps, meters, shutoff valves, relief valves, and other piping and valves.

Vapor balanced means connected to a piping system that is designed to collect vapors displaced from tank trucks, rail cars, ships, or barges during loading, and to route the collected vapors to the storage vessel from which the liquid being loaded originated, or to another storage vessel connected by a common header.

Vent means the point of discharge to the atmosphere or to a control device from either an HCl process vent, an HCl storage tank, or an HCl transfer operation.

Water scrubber control device means any add-on device that mixes an aqueous stream not containing a caustic substance with the exhaust gases from an HCl process vent, HCl storage tank, or HCl transfer operation to control emissions of HCl and/or Cl<sub>2</sub>.

### **Tables to Subpart NNNNN of Part 63**

#### **Table 1 to Subpart NNNNN of Part 63--Emission Limits and Work Practice Standards**

As stated in §63.9000(a), you must comply with the following emission limits and work practice standards for each emission stream that is part of an affected source:

<b>For each...</b>	<b>You must meet the following emission limit and work practice standard.</b>
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1. Emission stream from an HCl process vent at an existing source	a. Reduce HCl emissions by 99 percent or greater or to an outlet concentration of 20 ppm by volume or less; and  b. Reduce Cl <sub>2</sub> emissions by 99 percent or greater or to an outlet concentration of 100 ppm by volume or less.
2. Emission stream from an HCl storage tank at an existing source	Reduce HCl emissions by 99 percent or greater or to an outlet concentration of 120 ppm by volume or less.
3. Emission stream from an HCl transfer operation at an existing source	Reduce HCl emissions by 99 percent or greater or to an outlet concentration of 120 ppm by volume or less.
4. Emission stream from leaking equipment in HCl/Cl <sub>2</sub> service at existing and new sources	a. Prepare and operate at all times according to an equipment LDAR plan that describes in detail the measures that will be put in place to detect leaks and repair them in a timely fashion; and  b. Submit the plan to the Administrator <b>for comment only</b> with your Notification of Compliance Status; and  c. You may incorporate by reference in such plan existing manuals that describe the measures in place to control leaking equipment emissions required as part of other federally enforceable requirements, provided that all manuals that are incorporated by reference are submitted to the Administrator.

5. Emission stream from an HCl process vent at a new source	a. Reduce HCl emissions by 99.4 percent or greater or to an outlet concentration of 12 ppm by volume or less; and  b. Reduce Cl <sub>2</sub> emissions by 99.8 percent or greater or to an outlet concentration of 20 ppm by volume or less.
6. Emission stream from an HCl storage tank at a new source	Reduce HCl emissions by 99.9 percent or greater or to an outlet concentration of 12 ppm by volume or less.
7. Emission stream from an HCl transfer operation at a new source	Reduce HCl emissions by 99 percent or greater or to an outlet concentration of 120 ppm by volume or less.

**Table 2 to Subpart NNNNN of Part 63--Operating Limits**

As stated in §63.9000(b), you must comply with the following operating limits for each emission stream that is part of an affected source that is vented to a control device:

For each...	You must...
1. Caustic scrubber or water scrubber/absorber	a. Maintain the daily average scrubber inlet liquid or recirculating liquid flow rate, as appropriate, above the operating limit; and  b. Maintain the daily average scrubber effluent pH within the operating limits; or  c. Instead of a. and b., maintain your operating parameter(s) within the operating limits established according to your monitoring plan established under §63.8(f).

2. Other type of control device to which HCl emissions are ducted	Maintain your operating parameter(s) within the limits established during the performance test and according to your monitoring plan.
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**Table 3 to Subpart NNNNN of Part 63-Performance Test Requirements for HCl Production Affected Sources**

As stated in §63.9020, you must comply with the following requirements for performance tests for HCl production for each affected source:

<b>For each HCl process vent and each HCl storage tank and HCl transfer operation for which you are conducting a performance test, you must...</b>	<b>Using...</b>	<b>Additional Information...</b>
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1. Select sampling port location(s) and the number of traverse points	a. Method 1 or 1A in appendix A to 40 CFR part 60 of this chapter	i. If complying with a percent reduction emission limitation, sampling sites must be located at the inlet and outlet of the control device prior to any releases to the atmosphere (or, if a series of control devices are used, at the inlet of the first control device and at the outlet of the final control device prior to any releases to the atmosphere); or  ii. If complying with an outlet concentration emission limitation, the sampling site must be located at the outlet of the final control device and prior to any releases to the atmosphere.
2. Determine velocity and volumetric flow rate	Method 2, 2A, 2C, 2D, 2F, or 2G in appendix A to 40 CFR part 60 of this chapter	
3. Determine gas molecular weight	a. Not applicable	i. Assume a molecular weight of 29 (after moisture correction) for calculation purposes.
4. Measure moisture content of the stack gas	Method 4 in appendix A to 40 CFR part 60 of this chapter	

5. Measure HCl concentration and Cl <sub>2</sub> concentration from HCl process vents	a. Method 26A in Appendix A to 40 CFR part 60 of this chapter	i. An owner or operator may be exempted from measuring the Cl <sub>2</sub> concentration from an HCl process vent provided that a demonstration that Cl <sub>2</sub> is not likely to be present in the stream is submitted as part of the site-specific test plan required by §63.9020(a)(2). This demonstration may be based on process knowledge, engineering judgement, or previous test results.
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6. Establish operating limits with which you will demonstrate continuous compliance with the emission limits in Table 1 to this subpart, in accordance with §63.9020(e)(1) or (2).

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**Table 4 to Subpart NNNNN of Part 63-Initial Compliance with Emission Limitations and Work Practice Standards**

As stated in §63.9030, you must comply with the following requirements to demonstrate initial compliance with the applicable emission limits for each affected source vented to a control device and each work practice standard:

<b>For each...</b>	<b>For the following emission limit or work practice standard...</b>	<b>You have demonstrated initial compliance if...</b>
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1. HCl process vent and each HCl storage tank and HCl transfer operation for which you are conducting a performance test	a. In Table 1 to this subpart	<p>i. The average percent reduction of HCl and Cl<sub>2</sub> (if applicable), measured over the period of the performance test conducted according to Table 3 of this subpart and determined in accordance with §63.9020(b), is greater than or equal to the applicable percent reduction emission limitation specified in Table 1 of this subpart; or</p> <p>ii. The average HCl and Cl<sub>2</sub> (if applicable) concentration, measured over the period of the performance test conducted according to Table 3 of this subpart, is less than or equal to the applicable concentration emission limitation specified in Table 1 of this subpart.</p>
2. HCl storage tank and HCl transfer operation for which you are preparing a design evaluation in lieu of conducting a performance test	a. In Table 1 to this subpart	<p>i. The percent reduction of HCl, demonstrated by a design evaluation prepared in accordance with §63.9020(c), is greater than or equal to the applicable percent reduction emission limitation specified in Table 1 of this subpart; or</p>

ii. The HCl concentration, demonstrated by a design evaluation prepared in accordance with §63.9020(c), is less than or equal to the applicable concentration emission limitation specified in Table 1 of this subpart.

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3. Leaking equipment	a. In Table 1 to this subpart	i. You certify in your Notification of Compliance Status that you have developed and implemented your LDAR plan and submitted it to the Administrator for comment only.
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**Table 5 to Subpart NNNNN of Part 63—Continuous Compliance with Emission Limitations and Work Practice Standards**

As stated in §63.9040, you must comply with the following requirements to demonstrate continuous compliance with the applicable emission limitations for each affected source vented to a control device and each work practice standard:

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<b>For each...</b>	<b>For the following emission limitation and work practice standard...</b>	<b>You must demonstrate continuous compliance by...</b>
1. Affected source using a caustic scrubber or water scrubber/absorber	a. In Tables 1 and 2 to this subpart	i. Collecting the scrubber inlet liquid or recirculating liquid flow rate, as appropriate, and effluent pH monitoring data according to §63.9025, consistent with your monitoring plan; and

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ii. Reducing the data to 1-hour and daily block averages according to the requirements in §63.9025; and

iii. Maintaining the daily average scrubber inlet liquid or recirculating liquid flow rate, as appropriate, above the operating limit; and

iv. Maintaining the daily average scrubber effluent pH within the operating limits.

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2. Affected source using any other control device

a. In Tables 1 and 2 to this subpart

i. Conducting monitoring according to your monitoring plan established under §63.8(f) in accordance with §63.9025(c); and

ii. Collecting the parameter data according to your monitoring plan established under §63.8(f); and

iii. Reducing the data to 1-hour and daily block averages according to the requirements in §63.9025; and

iv. Maintaining the daily average parameter values within the operating limits established according to your monitoring plan established under §63.8(f).

3. Leaking equipment affected source	a. In Table 1 to this subpart	i. Verifying that you continue to use a LDAR plan; and  ii. Reporting any instances where you deviated from the plan and the corrective actions taken.
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#### **Table 6 to Subpart NNNNN of Part 63—Requirements for Reports**

As stated in §63.9050(a), you must submit a compliance report that includes the information in §63.9050(c) through (e) as well as the information in the following table. You must also submit startup, shutdown, and malfunction (SSM) reports according to the requirements in §63.9050(f) and the following:

<b>If...</b>	<b>Then you must submit a report or statement that:</b>
1. There are no deviations from any emission limitations that apply to you	There were no deviations from any emission limitations that apply to you during the reporting period.
2. There were no periods during which the operating parameter monitoring systems were out-of-control in accordance with the monitoring plan	There were no periods during which the CMS were out-of-control during the reporting period.
3. There was a deviation from any emission limitation during the reporting period	Contains the information in §63.9050(d).
4. There were periods during which the operating parameter monitoring systems were out-of-control in accordance with the monitoring plan	Contains the information in §63.9050(d).

5. There was a SSM during the reporting period that is not consistent with your SSM plan

Contains the information in §63.9050(f).

6. There were periods when the procedures in the LDAR plan were not followed

Contains the information in §63.9050(c)(7).

**Table 7 to Subpart NNNNN of Part 63—Applicability of General Provisions to Subpart NNNNN**

As stated in §63.9065, you must comply with the applicable General Provisions requirements according to the following:

Citation	Requirement	Applies to Subpart NNNNN	Explanation
§63.1	Initial applicability determination; applicability after standard established; permit requirements; extensions; notifications	Yes	
§63.2	Definitions	Yes	Additional definitions are found in §63.9075.
§63.3	Units and abbreviations	Yes	
§63.4	Prohibited activities; compliance date; circumvention, severability	Yes	

§63.5	Construction/ reconstruction applicability; applications; approvals	Yes	
§63.6(a)	Compliance with standards and maintenance requirements- applicability	Yes	
§63.6(b) (1) - (4)	Compliance dates for new or reconstructed sources	Yes	§63.8995 specifies compliance dates.
§63.6(b) (5)	Notification if commenced construction or reconstruction after proposal	Yes	
§63.6(b) (6)	[Reserved]	Yes	
§63.6(b) (7)	Compliance dates for new or reconstructed area sources that become major	Yes	§63.8995 specifies compliance dates.
§63.6(c) (1) - (2)	Compliance dates for existing sources	Yes	§63.8995 specifies compliance dates.
§63.6(c) (3) - (4)	[Reserved]	Yes	
§63.6(c) (5)	Compliance dates for existing area sources that become major	Yes	§63.8995 specifies compliance dates.
§63.6(d)	[Reserved]	Yes	
§63.6(e) (1) - (2)	Operation and maintenance requirements	Yes	
§63.6(e) (3)	SSM plans	Yes	



§63.6(f) (1)	Compliance except during SSM	Yes	
§63.6(f) (2) - (3)	Methods for determining compliance	Yes	
§63.6(g)	Use of an alternative nonopacity emission standard	Yes	
§63.6(h)	Compliance with opacity/visible emission standards	No	Subpart NNNNN does not specify opacity or visible emission standards.
§63.6(i)	Extension of compliance with emission standards	Yes	
§63.6(j)	Presidential compliance exemption	Yes	
§63.7(a) (1) - (2)	Performance test dates	Yes	Except for existing affected sources as specified in §63.9010(b).
§63.7(a) (3)	Administrator's Clean Air Act section 114 authority to require a performance test	Yes	
§63.7(b)	Notification of performance test and rescheduling	Yes	
§63.7(c)	Quality assurance program and site-specific test plans	Yes	

§63.7(d)	Performance testing facilities	Yes	
§63.7(e) (1)	Conditions for conducting performance tests	Yes	
§63.7(f)	Use of an alternative test method	Yes	
§63.7(g)	Performance test data analysis, recordkeeping, and reporting	Yes	
§63.7(h)	Waiver of performance tests	Yes	
§63.8(a) (1) - (3)	Applicability of monitoring requirements	Yes	Additional monitoring requirements are found in §63.9005(d) and 63.9035.
§63.8(a) (4)	Monitoring with flares	No	Subpart NNNNN does not refer directly or indirectly to §63.11.
§63.8(b)	Conduct of monitoring and procedures when there are multiple effluents and multiple monitoring systems	Yes	
§63.8(c) (1) - (3)	Continuous monitoring system O&M	Yes	Applies as modified by §63.9005(d).

§63.8(c) (4)	Continuous monitoring system requirements during breakdown, out-of-control, repair, maintenance, and high-level calibration drifts	Yes	Applies as modified by §63.9005(d) .
§63.8(c) (5)	Continuous opacity monitoring system (COMS) minimum procedures	No	Subpart NNNNN does not have opacity or visible emission standards.
§63.8(c) (6)	Zero and high level calibration checks	Yes	Applies as modified by §63.9005(d) .
§63.8(c) (7) - (8)	Out-of-control periods, including reporting	Yes	
§63.8(d) - (e)	Quality control program and CMS performance evaluation	No	Applies as modified by §63.9005(d) .
§63.8(f) (1) - (5)	Use of an alternative monitoring method	Yes	
§63.8(f) (6)	Alternative to relative accuracy test	No	Only applies to sources that use continuous emissions monitoring systems (CEMS) .
§63.8(g)	Data reduction	Yes	Applies as modified by §63.9005(d) .

§63.9(a)	Notification requirements - applicability	Yes	
§63.9(b)	Initial notifications	Yes	Except §63.9045(c) requires new or reconstructed affected sources to submit the application for construction or reconstruction required by §63.9(b) (1) (iii) in lieu of the initial notification.
§63.9(c)	Request for compliance extension	Yes	
§63.9(d)	Notification that a new source is subject to special compliance requirements	Yes.	
§63.9(e)	Notification of performance test	Yes	
§63.9(f)	Notification of visible emissions/opacity test	No	Subpart NNNNN does not have opacity or visible emission standards.
§63.9(g) (1)	Additional CMS notifications - date of CMS performance evaluation	Yes	

§63.9(g) (2)	Use of COMS data	No	Subpart NNNNN does not require the use of COMS.
§63.9(g) (3)	Alternative to relative accuracy testing	No	Applies only to sources with CEMS.
§63.9(h)	Notification of compliance status	Yes	
§63.9(i)	Adjustment of submittal deadlines	Yes	
§63.9(j)	Change in previous information	Yes	
§63.10(a)	Recordkeeping/reporting applicability	Yes	
§63.10(b) (1)	General recordkeeping requirements	Yes	§§63.9055 and 63.9060 specify additional recordkeeping requirements.
§63.10(b) (2) (i)-(xi)	Records related to SSM periods and CMS	Yes	
§63.10(b) (2) (xii)	Records when under waiver	Yes	
§63.10(b) (2) (xiii)	Records when using alternative to relative accuracy test	No	Applies only to sources with CEMS.
§63.10(b) (2) (xiv)	All documentation supporting initial notification and notification of compliance status	Yes	

§63.10 (b) (3)	Recordkeeping requirements for applicability determinations	Yes	
§63.10 (c)	Additional recordkeeping requirements for sources with CMS	Yes	Applies as modified by §63.9005 (d) .
§63.10 (d) (1)	General reporting requirements	Yes	§63.9050 specifies additional reporting requirements.
§63.10 (d) (2)	Performance test results	Yes	
§63.10 (d) (3)	Opacity or visible emissions observations	No	Subpart NNNNN does not specify opacity or visible emission standards.
§63.10 (d) (4)	Progress reports for sources with compliance extensions	Yes	
§63.10 (d) (5)	SSM reports	Yes	
§63.10 (e) (1)	Additional CMS reports-general	Yes	Applies as modified by §63.9005 (d) .
§63.10 (e) (2) (i)	Results of CMS performance evaluations	Yes	Applies as modified by §63.9005 (d) .
§63.10 (e) (2) (ii)	Results of COMS performance evaluations	No	Subpart NNNNN does not require the use of COMS.
§63.10 (e) (3)	Excess emissions/CMS performance reports	Yes	

§63.10 (e) (4)	Continuous opacity monitoring system data reports	No	Subpart NNNNN does not require the use of COMS.
§63.10 (f)	Recordkeeping/reporting waiver	Yes	
§63.11	Control device requirements-applicability	No	Facilities subject to subpart NNNNN do not use flares as control devices.
§63.12	State authority and delegations	Yes	§63.9070 lists those sections of subparts NNNNN and A that are not delegated.
§63.13	Addresses	Yes	
§63.14	Incorporation by reference	Yes	Subpart NNNNN does not incorporate any material by reference.
§63.15	Availability of information/confidentiality	Yes	